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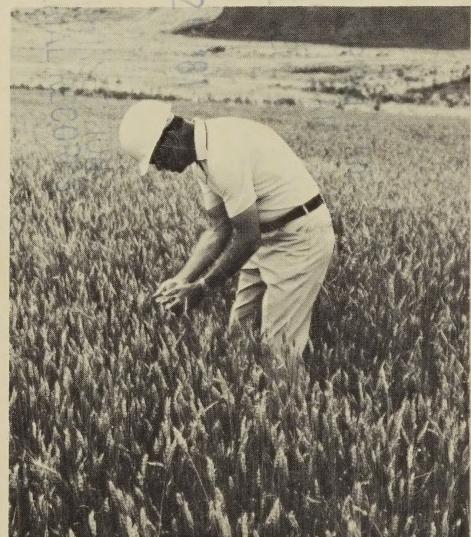
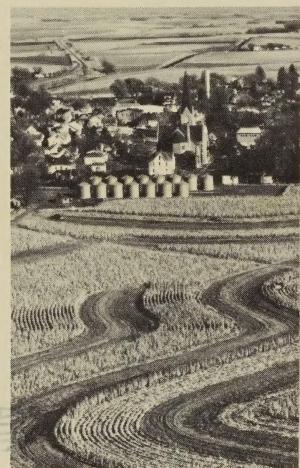


United States
Department of
Agriculture

Agriculture and the Environment

First Annual Report

Cop. 2



Agriculture and the Environment

First Annual Report on Agriculture's Contribution to a Better Environment



Office of Environmental Quality
U.S. Department of Agriculture

June 1980

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Foreword

Ten years ago, at the dawn of the environmental decade, we landed on the moon. For the first time people could stand on the surface of another world and look at the whole earth. The sight of earthrise was awesome. It was also sobering. From that moment we could no longer avoid understanding that all life must share this one small planet and its limited resources.

PRESIDENT CARTER

Failure to protect our agriculture and the natural resources on which it depends will put us on a collision course with disaster.

BOB BERGLAND, Secretary of Agriculture

I feel we must be more concerned about our natural cycles, our ecosystems, so that we accurately consider all the impacts of our decisions. We must look for secondary impacts and beyond. Our "Spaceship Earth" is very dependent, subject to shocks which appear minor, but which may be in fact catastrophic.

M. RUPERT CUTLER, Assistant Secretary
for Natural Resources and Environment

Preface

President Carter issued his first Environmental Message August 24, 1977. In it he emphasized preserving our national heritage, and issued five Executive orders to insure that Federal agencies work in partnership to:

- Develop environmentally sound energy sources.
- Control pollution to protect our health.
- Improve our urban environments.
- Protect our natural resources.
- Protect our wildlife.
- Affirm our concern for the global environment.
- Improve the implementation of environmental laws.

On August 2, 1979, President Carter issued his second Environmental Message in which he reaffirmed fundamental policies that have guided his Administration. He also explained his Administration's environmental priorities for the 96th Congress, and announced new policies in 12 areas, which reflected his recognition of the need to:

- Increase commitment to public transportation.

- Investigate the effects of acid rain on the environment.
- Improve both protection and management of coastal resources and public lands.
- Enforce vigorously laws that protect wildlife.
- Reduce farmland loss and erosion.

With this message, the President assured the American people that environmental programs would claim a central place on the Administration's agenda during the coming year, and that he would strongly encourage Federal agencies to work together and to solicit public participation and comment to achieve the goals he outlined for the Nation.

The United States Department of Agriculture has made substantial progress in fulfilling its responsibility to integrate environmental concerns into its ongoing programs. A new agency—the Office of Environmental Quality—has been established to coordinate environmental issues among USDA agencies and represent the Office of the Secretary on broad departmental issues. Its establishment affirms Agriculture's commitment to assuring wholesome and plentiful food and fiber for consumers at home and abroad without despoiling the environment. This is not a contradiction of terms. It is not only possible, but essential for good agricultural and forestry practices to coexist with a quality environment.

In the past, many were guilty of exploiting the land and moving on. But the experiences of the Dust Bowl and the presence of increasingly large areas of "farmed out" land turned public opinion and policy against this approach.

Today, most landholders think of their land as a valuable national resource, and they feel a responsibility to keep it well maintained and productive. Government programs must reflect this philosophy, too. That more and more of them do is exemplified by some of the programs described in this report. Much remains to be done, however. Nationally, we must do a better job of caring for our agricultural and forest lands. Erosion and aggressive land development eat away at our capacity to produce food and fiber. We are beginning to recognize the need to exercise greater care in the use of chemicals, irrigation, fire in forest management, and other powerful tools-tools which may be at our disposal, but which are not to be used without thoughtful discretion.

Federal agencies have made a special effort in recent years to develop better interdepartmental working relationships. For example, a new Memorandum of Understanding was developed between USDA and EPA to formalize

our commitment to work together on problems which can benefit the programs of both agencies. This new spirit of cooperation and coordination has had many results, such as increased awareness of how our programs affect prime farmland; better data collection, analysis, and implementation of integrated pest management programs; and joint efforts to cope with increasing acid rain problems.

This is the first of what will be annual reports of the Office of Environmental Quality. References to 1977 and 1978 activities appear throughout the report.

This report is organized by the subjects addressed in the President's Environmental Messages of 1977 and 1979. The material should not be considered all inclusive, however, as the Department's work in maintaining environmental quality is extensive and covers a diversity of fields.

A handwritten signature in black ink, appearing to read "Barry R. Flamm".

BARRY R. FLAMM
Director
Office of Environmental Quality



I. The National Environmental Policy Act

The National Environmental Policy Act (NEPA) is the single most important piece of environmental legislation passed in recent years. In just 10 years it has significantly altered the way Americans view their relationship to the environment.

In the past, pressure for development too often resulted in the exploitation of resources, with little regard to the environmental consequences. NEPA is helping to change that, and has significantly improved the ways in which agencies make decisions that affect the environment. Time has shown the value of using the process called for in NEPA as the heart of decisionmaking. USDA is one of the most diverse departments in all of Government, with a great variety of program responsibilities. Yet the NEPA system—calling for an assessment of the environment, investigation of meaningful alternatives, and description of impact—is an approach that meets the needs of all agencies within the Department. USDA salutes the wisdom and foresight of those who drafted such a far reaching bill. It will continue to protect the environment for future generations.

Inherent in the Act is the view that we do not own land forever, that in fact, we are only the stewards of the land and other resources during our lifetimes, and we have a responsibility to use them wisely. Human beings are the only living creatures with the capacity to change the process of life significantly, to introduce new forces that can radically influence the environment on earth and even into the biosphere.

The Act sets forth six goals that express its purpose and the philosophy behind it. The overall intent is to improve and coordinate Federal plans, functions, programs, and resources so the Nation can:

1. Fulfill each generation's responsibilities as trustee of the environment for succeeding generations.
2. Assure for all Americans safe, healthful, and productive surroundings that are esthetically and culturally pleasing.
3. Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable consequences.
4. Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice.

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5. Achieve a balance between population and the use of resources which will permit high standards of living and a wide sharing of life's amenities.
 6. Enhance the quality of renewable resources and approach the maximum attainable recycling of those resources which are depleted.

The Department of Agriculture has had 10 years of experience in implementing NEPA. Agencies within the Department took differing views on how the Act affected their programs early in the 1970's. Environmental groups were concerned about the inadequacy of environmental impact statements (EIS's) and brought litigation against various USDA agencies. Most notable were suits against the Forest Service over clear cutting of forests and against the Soil Conservation Service over stream channel modification projects.

President Carter's first Environmental Message in 1977 brought a new element to environmental evaluation and assessment. The Council on Environmental Quality (CEQ) was directed to issue regulations requiring all Federal agencies to meet the criteria of Section 102(2)(C) of NEPA, which it did. These regulations are binding on all agencies. In addition, each agency was required to develop implementing procedures to assure that environmental concerns are handled on a uniform basis consistent with the CEQ regulations.

USDA was the first department to adopt such implementing procedures, issuing them in the Federal Register on July 30, 1979. The Forest Service, Soil Conservation Service, Agricultural Stabilization Service, Science and Education Administration, Animal and Plant Health Inspection Service, and Rural Electrification Administration have since developed implementing procedures to supplement the first departmentwide procedures.

Each agency must prepare a *concise* public record when it makes a decision on an action. It must state



what its decision is, and how the EIS was considered and used. The NEPA regulations stress that decisions will be improved if agencies concentrate on the important issues and trim away masses of background data that obscure the real choices. The CEQ regulations recommended that EIS's should not exceed 150 pages or, for complex proposals, 300 pages.

Several provisions of the regulations are expected to reduce delays in decisionmaking: Integrating the NEPA review early in the planning of actions reduces delay at later

stages, and making the NEPA review concurrent with other environmental reviews and consultations eliminates duplication.

The Council's NEPA regulations clarify how NEPA applies to situations which have been handled differently by different agencies in the past. They establish a basic uniform approach and set down clearly what is to be done, eliminating the confusion of varying agency practices.



II. Land Use and Conservation

In response to a widespread concern over the impact of Federal agency actions on agricultural land loss, USDA Secretary Bergland and CEQ Chairman Speth are jointly leading a comprehensive evaluation by 11 Federal agencies of the extent, nature, and cause of the loss of more than 3 million acres of agricultural land each year, and of the economic, environmental, and social impacts of that loss. The following facts demonstrate the urgency for a better understanding of land conversion:

- World population has passed 4 billion and is projected to increase by 75 percent by the end of this century.
- Projected increases in per capita consumption and export demands will place an increasingly large burden on our ability to feed both ourselves and the world's hungry population by 2030.
- The replacement of cropland acreages lost to urban growth, transportation, and other nonagricultural uses comes at a great capital, energy, labor, and conservation development cost to both the private and public sectors.
- The demand for agricultural crops for energy production will increase dramatically during the eighties.

The challenge is to meet these demands while protecting the Nation's environmental quality.

Cropland — The acreage of nonfederal land used for cropland was down to 413 million acres in 1977 primarily as a result of improved technology. Irrigation remains essential to maintaining viable agriculture in the West. Supplemental irrigation is becoming more common in other areas, too.

Developing new high quality cropland is more difficult and expensive than developing land for other agricultural uses. As commodity prices, technology, water availability, energy costs, and environmental considerations change, so will the potential for new agricultural lands. The USDA and CEQ-sponsored study will look at land use trends, identify major factors affecting loss of our best farmlands, and report its findings to the President by January 1981.

Prime Farmland — *In early 1979, the Soil Conservation Service (SCS) published designations for prime and unique farmlands (7 CFR 657.5) and outlined the procedure for conducting statewide in-*

ventories of such farmlands and of farmlands designated to be of importance statewide.

USDA helps local people and communities by identifying these valuable farmlands. Prime farmlands have the best combination of physical and chemical characteristics for producing food, feed, fiber, and oilseed crops. In general, these lands have dependable water supplies, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. A recent study showed that approximately 346 million acres of prime farmland exist in the United States.

Land Use Policy — The Secretary recognized the need for USDA to lead other Federal agencies in the revision of policies on land use. To this end, USDA issued a revised statement on land use policy on October 30, 1978. It reaffirmed the Department's recognition of the responsibility of private land-holders, States, and units of local government to make and carry out land use policies on all nonfederal lands to serve as a good example of natural resource management. The Secretary also called for the

intercession of the Department wherever and whenever the actions of other Federal agencies could or would encourage the loss of agricultural lands when other alternatives were available.

The Department's revised land use policies also included the policy changes necessary to implement the President's 1977 Environmental Message initiatives on the Protection of Wetlands and the Regulation of Floodplains, contained in Executive Orders 11988 and 11990. Department members helped prepare and publish "Our Nation's Wetlands," an interagency task force report. The 70-page multicolored report provided a broad and balanced review of the status of the Nation's wetlands, their ecological functions, and case studies of their alteration for a wide variety of uses. The task force of Federal agency staff members was aided by a group of technical advisers from other Federal agencies, universities and colleges, and an environmental law interest group.

On December 7, 1979, the Secretary received the first annual report from his agencies on their implementation of the policy on land use.

All agencies reported substantial progress in emphasizing the protection of agricultural lands, wetlands, and floodplains through changes in their rules, regulations, directives, and other operating documents.



Conservation Incentives Study — In response to the President's 1979 Environmental Message, the Department, in consultation with CEQ, is undertaking a comprehensive review of the effects of USDA's agricultural assistance programs on its soil conservation incentive programs. The report to the President is scheduled for January 1981.

Historically, there has been a lack of coordination between establishing commodity support programs and their resulting environmental impacts. Recent market shortages caused millions of acres of "fragile" croplands to be brought back into production, both destroying the public's investment in the protection of those

lands and contributing to increased soil erosion and water quality degradation. Many conservation practices were either impaired or lost to fence-row to fence-row farming.

Resource Planning Acts — The Forest and Rangeland Renewable Resource Planning Act (RPA), the Soil and Water Resources Conservation Act (RCA), and the Renewable Resources Extension Program (RREP) are aimed at improving the delivery of USDA's services through redesigning basic natural resource programs, policies, and actions, and targeting

solutions through extensive public involvement programs. Only congressional action can supply the funding levels and the legislative authority needed to meet the public's identified needs through these programs. The Resource Conservation Act of 1978 was landmark legislation which directs the Secretary to develop a long range program for all USDA soil and water conservation programs, and to apply a standard of high environmental quality to that program. A report of RCA progress will be sent to Congress in 1980, and updated in 1985. An inter-agency coordinating committee has been established to oversee the report.

Public review and comment provisions have been incorporated into RCA, and into RPA and RREA as well. The Department will be looking for the public's help during 1980 in finding new approaches to attaining USDA's goals and answering the public's needs at the same time.

National Resource Inventory (NRI)

— During 1978, SCS conducted an inventory of all nonfederal lands in the continental United States, Alaska, Hawaii, Puerto Rico, and the Virgin Islands to assess the erosion problem caused by wind and water. In 1977, SCS began phase 1 of its NRI to update conservation needs and soil erosion estimates, to help appraise resource conditions and trends, and generally to provide information to guide future soil and water programs.

Phase 1 has been completed. It includes data on land capability classes (soil quality), land use and use of small water areas, conservation needs, flood-prone areas, wetlands, sheet and rill erosion, wind erosion in the 10 Great Plains States, potential for new cropland, irrigation, and prime farmlands.

Phase 2 of the NRI is just being completed and includes data on gully, streambank, roadside, and construction site erosion.

Phase 3 will be completed in 1980. It will use new data in a computer model to estimate sediment delivery in major river basins.

The annual sheet and rill erosion for all cropland in the United States averages 4.8 tons per acre. This varies from less than 1 ton per acre in some States to more than 40 tons per acre for the Caribbean area. More than 48 million acres of cropland average in excess of 14 tons of erosion per acre per year. Sloping croplands



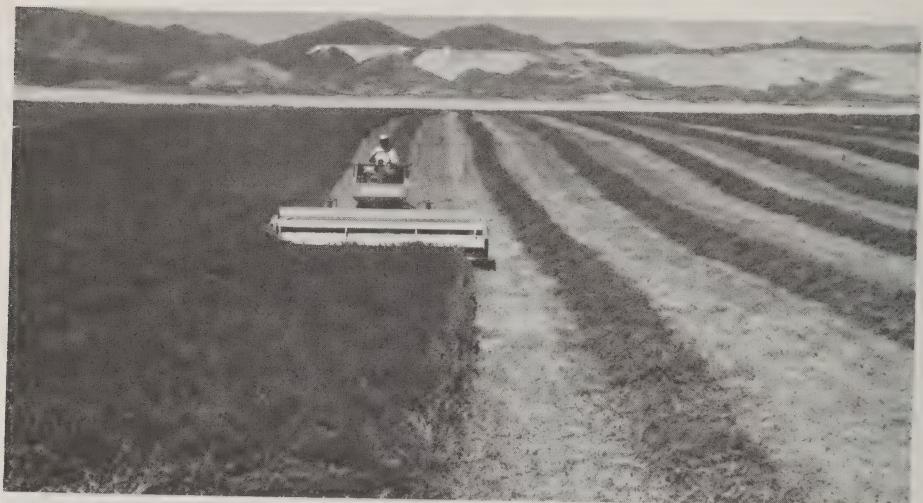
are eroding at 1 to 4 times what conservationists consider to be permissible rates. In addition, the annual soil loss on cropland from erosion by wind averages 5.3 tons per acre in the 10 Great Plains States.

Soil Surveys — Soil surveys provide essential information for environmental planning. They identify the suitability of land for farming, forage production, wood crop production, wildlife habitat, organic residue utilization, and for urban uses.

The goal of the National Cooperative Soil Survey is to complete soil surveys on all the Nation's land by about 1996 with current resources. *Soil mapping has been completed on approx-*

imately 67 percent of the Nation's 2.27 billion acres. Since 1977, about 150 million acres have been mapped and 311 publications released on soils in high priority areas.

Rangelands — In cooperation with the Department of the Interior and CEQ, USDA initiated a symposium featuring an indepth look at "Rangelands Policies for the Future." The Office of Environmental Quality provided the leadership in the coordination of this symposium, called the most



important rangeland event during the past two decades by many of the cooperating groups. Following the symposium, USDA initiated many activities to build on the suggestions provided. Secretary Bergland developed a Statement of Range Policy, released October 25, 1979 as Memorandum No. 1999, in which the standards and specifications for many conservation practices for rangeland management have been revised to expand and emphasize guidance for environmental concerns.

Brush management practices have been revised to deemphasize total removal, and to emphasize management of brush stands. Experience and research show that certain brush species can be both valuable forage and habitat. Brush now is removed in natural or designed patterns on the landscape. These patterns are esthetically more pleasing and provide habitat cover adjacent to forage and water, which reduces herbicide needs and requires less energy than removing all brush.

Standards and specifications for planned grazing systems have been revised to emphasize management designed to achieve rapid range improvement and efficient harvest or range forage, require less labor and energy, and improve erosion control. Recent range inventories show a significant improvement in range conditions from 1963 to

1977. However, the NRI shows many millions of acres of private rangelands in either poor or fair condition.

A departmental task group is developing criteria for the classification of prime rangelands. These criteria will help designate better quality rangelands for protection from irreversible conversion to other land uses.

Arid and Semiarid Lands — The arid and semiarid lands and associated ecosystems are fragile resources with many current and potential uses. In the Western United States, 350 million acres of arid and semiarid lands are known to have vegetation and soil conditions that are at 40 percent or less of their biological potential. These lands and similar lands in Mexico are suffering from desertification—the process by which productive lands are engulfed by the desert. This occurs primarily as a result of misuse by people, often accelerated by harsh climatic conditions. Arid lands and range research by the Forest Service and the Science and Education Administration improves the productivity of forage for both domestic livestock and wildlife, yet recognizes that these lands are being used increasingly for a wide variety of other purposes, from mining to recreation.

USDA agencies are working to

improve arid and semiarid rangeland productivity:

- Grazing systems have been developed and species of vegetation selected and established to improve range productivity and nutritional value for animals.
- President Carter signed an agreement with Mexico during his visit in 1979 to cooperate in improving management of arid and semiarid lands of both countries.
- The Forest Service is preparing a national plan to combat desertification.
- Research is underway on the production of natural rubber from such lands through the cultivation of Guayule, a native desert plant.

Executive Orders 11988, Floodplain Management and 11990, Protection of Wetlands — In 1979, the Department's agencies developed and published in the Federal Register proposed rules for implementing Executive Orders 11988, Floodplain Management, and 11990, Protection of Wetlands.

An estimated 1/2 million acres per year of wetlands are being con-

verted to other uses. USDA is committed to reducing the loss of wetlands which may result from USDA programs. Many USDA agencies have taken positive steps toward this goal: ASCS eliminated cost-share payments for drainage. SCS has revised the regulations governing technical assistance provided to private landowners so that assistance which aids wetland conversions is not provided.

USDA agencies cosponsored two national wetland symposiums in 1978: *Protection and Management of Floodplain Wetlands and Other Riparian Ecosystems*, and the *National Symposium on Wetland Values*. The field offices of SCS provided technical assistance to private landowners with wetland habitat on 610,497 acres in 1977 and on 554,742 acres in 1978.

Mine Land Reclamation — In August 1977, President Carter signed a major environmental protection and restoration law, The Surface Mining Control and Reclamation Act of 1977 (P.L. 95-87). This law authorized the development and implementation of environmental protection standards for active coal mining operations and environmental restoration programs for abandoned mine lands. USDA provides leadership

in two major components of the law: Standards for the reconstruction of prime farmland soils disturbed by active mining, and the Rural Abandoned Mine Program.

The Forest Service and Science and Education Administration continue to do research on reclamation of strip mined lands. Their mission is to develop, demonstrate, and apply practical methods for reducing damage to the environment, including water, soil, wildlife, range, recreation, and esthetics during mining, and to restore these resources after mining.

USDA is working with the Office of Surface Mining (OSM) to develop the permanent regulatory programs for surface coal mining and reclamation operations. Current efforts include participation in reviewing and approving State regulatory programs, which are prerequisite for environmentally sound operating plans administered by States.

The USDA Mine Land Reclamation Committee helped the Office of Surface Mining to develop standards for reconstructing prime farmland soils after mining to near their premining level of productivity, while also meeting environmental standards for erosion, sediment, water control, and revegetation.

Section 406 of P.L. 95-87 authorized the Secretary to develop a Rural Abandoned Mine Program (RAMP) to reclaim abandoned

rural coal lands. Technical and financial assistance is given to land users through long term contracts to restore abandoned coal lands and affected areas. SCS serves as lead agency. A final environmental impact statement of the Rural Abandoned Mine Program became available in 1978. Final program rules and regulations became effective on October 2, 1978.

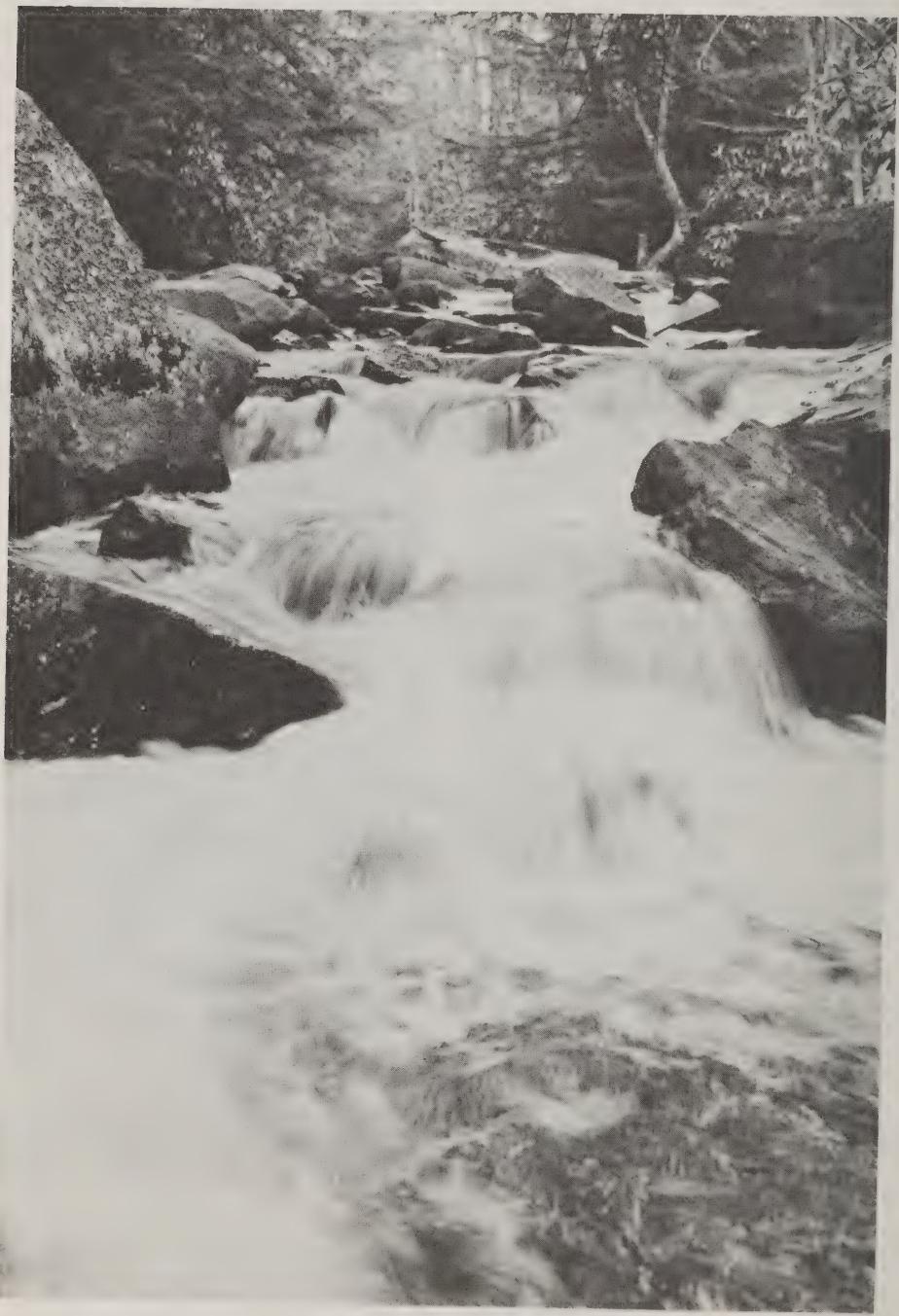
To date, more than 2,500 applications for program assistance have been filed by land users in 21 States. SCS is assisting land users to develop reclamation plans as a basis for contracts. The first program contract was signed June 25, 1979 with the town of Junior, West Virginia.

Coastal Zone — Coastal lands are unique and fragile ecosystems. The actions of all Federal agencies have the potential for beneficial as well as adverse impacts on the implementation of coastal zone programs. To highlight this Administration's concern for these important resources, President Carter endorsed the designation of 1980 as the "Year of the Coast." The actions of USDA agencies are being planned and carried out so as to have the maximum positive impact on coastal zone resources.

USDA continues to provide technical assistance to the Office of Coastal Zone Management (OCZM) and the State counterparts in the development and im-



plementation of coastal zone programs. The management plans for those National Forests in the coastal zone are being cooperatively developed with State and local coastal zone planning organizations in order to insure that the management of those public lands complements rather than conflicts with Coastal Zone Management programs.



III. Water Resources and Conservation

Water Policy — In response to the President's Water Resources Policy Reform Message of June 6, 1978, and his directive of July 12, 1978, USDA has cooperated with the Water Resources Council (WRC) to develop consistent planning and evaluation procedures for water resources projects. The President directed the Water Resources Council and its member agencies to:

- Adhere scrupulously to the WRC's principles and standards pertaining to water quality and water conservation.
- Publish a planning manual to insure accurate and consistent calculations of benefits and costs of projects.
- Provide greater consideration of water conservation and nonstructural alternatives as water projects are planned.

Water Resources Projects — The WRC, which includes representatives of the Secretaries of the major affected departments, has recently published the revised Principles and Standards and a manual of procedures as rules and regulations for planning water resource projects.

An additional Presidential directive to the Department of Agriculture called for "accelerating land treatment measures before funding structural measures." In response, SCS altered its program regulations to require at least 50 percent of the land above a proposed structure to be adequately protected by having installed the necessary land treatments before beginning construction of a major reservoir.

In addition, SCS adjusted the watershed program to require that land treatment practices be considered on an equal basis with structural measures, and provided for long-term agreements to install soil and water conservation, water pollution abatement, and fish and wildlife habitat practices. Much of the data to be developed for future projects will come from an aggressive post-project monitoring effort to insure implementation of land treatment and operation and maintenance activities. This information will be extremely helpful in determining how well a project is meeting planned objectives.

Measures taken to carry out the Presidential directives include:

- Checking installed land treatment measures against those specified in the project plan.
- Using long term agreements and spot checking to insure that land treatment is properly installed and maintained.



- Inspecting dams and other water control structures regularly to check their operation and safety status.
- Monitoring project impacts on adjacent areas.
- Checking pre- and post-project conditions against the projected conditions of project plans.

Channel Modification Guidelines

— The disagreement over the value of and need to modify stream channels has been an item of considerable debate and controversy during the past few years between development groups and environmental groups. Under the direction of Assistant Secretary

Cutler, SCS developed "Channel Modification Guidelines" in cooperation with the Fish and Wildlife Service to establish ground rules governing the practice of stream channel modification. The guidelines have been tested for about a 1-year period. They have been modified to make necessary adjustments with the intention of adopting the final guidelines as binding rules governing the planning of future watershed projects. This effort has resulted in significant improvement in working relations between the two agencies, but even more important, it has resulted in watershed plans that are more sensitive to environmental values.

Nonstructural Measures — The President's water policy directive and WRC's procedures for analyzing benefits and costs call for

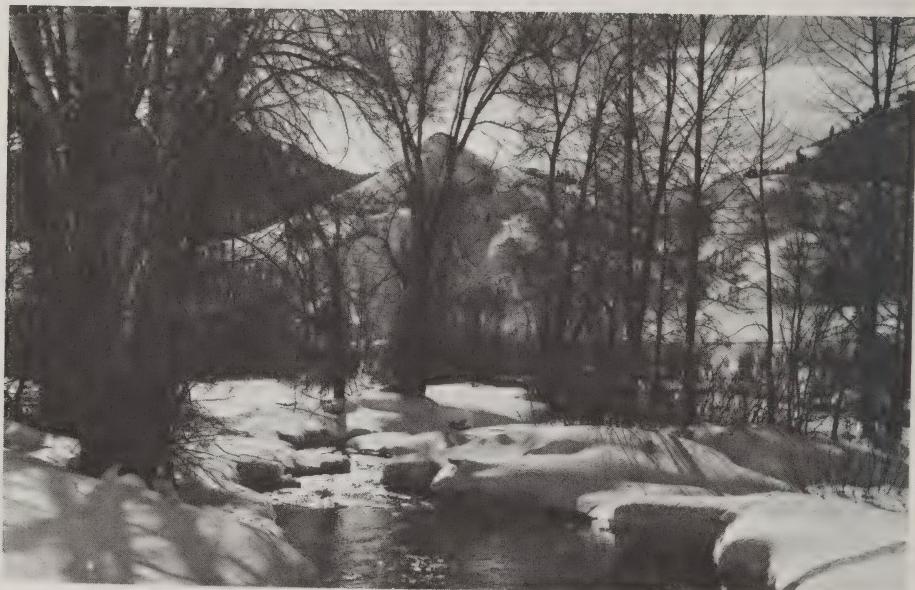


evaluating a primarily nonstructural plan as an alternative to structural plans for flood protection. The SCS has issued interim guidelines, policies, and procedures for implementing nonstructural solutions. The interim guidelines will be used until more experience is gained through testing of alternative nonstructural approaches.

Watershed Studies — In response to President Carter's directive of February 21, 1977, SCS conducted an indepth reevaluation of 749 of its watershed projects under construction. Those projects which were insupportable on economic, environmental, and/or safety grounds were identified and reevaluated by SCS, Office of Management and Budget, Council on Environmental Quality, and the U.S. Army Corps of Engineers.

Of the 749 projects reviewed, 48 were identified as having serious economic, environmental, or safety problems. The other projects either had no problems, were inactive, or would be corrected by revising the project plans. SCS worked with the States to determine what actions were to be taken to make these plans environmentally defensible. As of late 1979, 28 projects remained to be reevaluated and revised prior to construction.

Since the issuance of SCS rules for implementing NEPA, Channel Modification Guidelines, and rules for wetlands and floodplain management, 41 projects have been deauthorized, with 15 additional projects in the process of deauthorization.



Salinity Control Program — The Science and Education Administration (SEA), Agricultural Stabilization and Conservation Service (ASCS) and Soil Conservation Service (SCS) are cooperating with the Department of the Interior and the Environmental Protection Agency to carry out a salinity control program in accordance with P.L. 93-320, the "Colorado River Basin Salinity Control Act," signed into law in 1974. Its purpose is to improve water quality in the Colorado River to meet the international treaty obligation with Mexico. Installation of the on-farm improvement measures is scheduled to be completed by September 1980, and will materially reduce

the saline drainage water return flows from the Welton-Mohawk Irrigation District to the Colorado River.

Irrigation Water Use and Management — SCS, SEA, ESCS, and ASCS, with Interior's Water and Power Resources Service and the Environmental Protection Agency, are working to improve the efficiency of irrigation water use. The June 1979 report, "Irrigation Water Use and Management," notes that annual diversions ("withdrawals") could be decreased by 15 to 20 million acre feet by making irrigation system improvements over the next 30 years. This savings in water withdrawals could be used to improve instream flows or for other purposes.

Emergency Watershed Protection Program — In September 1979, SCS published proposed rules and regulations for the Emergency Watershed Protection program under the authorities of Section 403 of P.L. 95-334 and Section 216 of P.L. 81-516. The proposed rules state that "when planning emergency measures, emphasis should be placed on those most environmentally sound." These changes were made to insure that improvements along water courses are limited to those of a true emergency nature and will provide protection that will maintain habitat values to the maximum extent possible.

Erosion, Sedimentation, and Water Quality — The Iowa Field Evaluation Project (IFEP) is a cooperative effort of EPA, ASCS, SCS, SEA, and ESCS and numerous State, local, and other Federal agencies and farm people. The study will focus on water in a watershed while integrating many research activities that are often conducted individually. The role of Best Management Practices (BMP) in resource conservation will be examined in detail.

The Palouse Cooperative River Basin Study, recently completed, identifies alternative land treatment systems and their capacity to reduce erosion.

The Palouse, an area of eastern Washington and northwestern

Idaho, is the largest area of highly erosive cropland in the United States. The area is steeply rolling with highly erodible loess soils. Fifty-eight percent of the area is crop land and 28 percent is range-land. This high percentage of land being cropped has caused a decrease in all types of wildlife, and erosion has eliminated most fish from the streams.

In December 1979, Secretary Bergland announced the formation of a national soil erosion laboratory to focus and strengthen the USDA soil erosion-related research effort.



IV. National Heritage

Never in the history of this Nation has an Administration made such a broad-scale, concerted effort to protect for future generations our natural and cultural heritage. The Department of Agriculture has played a major role in furthering heritage programs by taking leadership in natural area protection, wildlife enhancement, and the cultural environment. But much more needs to be done, and much depends on the action of Congress.

Alaska — Perhaps most exciting of all are the actions to protect the wonders of Alaska. Some of the Nation's most spectacular scenery and important wildlife are located in the Chugach and Tongass National Forests in south central and southeast Alaska.

In 1978, the Department of Agriculture recommended as part of the congressional considerations for the Alaska lands bills that 5.9 million acres of National Forest Systems lands in Alaska be designated wilderness. Late in 1978, when Congress failed to pass legislation, the President acted to protect these important lands. President Carter proclaimed 1.1 million acres on Admiralty Island and 2.3 million acres of Misty Fiords as National Forest Monuments to protect their unique natural and cultural values. The Secretary of Agriculture also took action under Section 204(b) of the Federal Land Policy and Management Act to withdraw 11.2 million

acres from mineral entry and native selection. Encompassed in the withdrawal were all the areas proposed for protective status by the Administration, the Senate, and the House of Representatives. Early in the 96th Congress, the House of Representatives passed an Alaskan lands bill by an overwhelming margin. The Secretary of Agriculture amended his 1978 recommendations to include 6.2 million acres of wilderness in the National Forests in Alaska. The House bill designated 6.4 million acres of wilderness in National Forests in Alaska. As of this writing, the Senate has not passed a companion bill.

The Forest Service is administering the Admiralty and Misty Fiords National Monuments. The public has enthusiastically greeted the designation of these unique resources as National Monuments. Management to protect the wilderness values of the proposed areas will continue.

Expanding the Wilderness System

— President Carter in his 1977 Environmental Message conveyed support for a prompt expansion of the Wilderness System before the most valuable areas are opened to other uses and lost to wilderness forever. He called attention to the special need to preserve wilderness east of the Rockies and in Alaska.

The President endorsed and, in some cases, recommended expansion of the wilderness proposals submitted to the Congress by previous Administrations. The Administration especially endorsed the objectives of the Endangered American Wilderness legislation which passed Congress and was signed by the President on February 24, 1978. Since 1977, the Congress has passed legislation increasing the total wilderness in the National Forest System from 12.6 to 15.3 million acres and 110 units.

In 1979, the Forest Service completed a comprehensive review and evaluation of 62 million acres of roadless and underdeveloped National Forest System land (RARE II). As a result of this review, the President recommended to Congress wilderness designations for an additional 15.4 million acres.

This major action would almost double the amount of wilderness and increase its diversity and widen the geographic distribution of the National Wilderness Preservation System. Areas are recommended for wilderness in 35 States and Puerto Rico. All major ecosystems on National Forest Systems lands are represented in the proposals or in existing wilderness. Congress is now considering these proposals on a State by State basis.

A very important area, highlighted by the President in 1977, is the proposed River of No Return Wilderness. This area in Idaho includes the best of the Salmon River country where mountains, sparkling streams, and wildlife are plentiful. The Senate has passed a bill which would protect 2.2 million acres as wilderness. The House is now considering the measure.

Wild and Scenic Rivers — The Administration has recommended a number of rivers within the National Forests for protection as part of the National Wild and Scenic Rivers System. They are:

- Gunnison River, Colorado
- Encampment River, Colorado
- Priest River, Idaho
- Illinois River, Oregon

A total of 1,620 miles on 15 rivers within the National Forests has been protected under the Wild and Scenic Rivers System. The entire Wild and Scenic Rivers System on



all lands now totals 27 rivers and 2,350 miles.

Our Nation's rivers and adjacent lands are a rich concentration of natural and cultural values which we have been losing rapidly. In the 1979 Environmental Message, President Carter directed USDA to speed up the process for studying wild and scenic rivers for designation and to consider the protection of rivers which involve important natural ecosystems. In response to this directive, USDA has cooperated with the Department of the Interior to revise study guidelines to insure consideration of river ecosystems and to shorten the time currently used to study rivers for designation. The Department has also directed its agencies to avoid or mitigate adverse effects on rivers identified as potential candidates in the National Inventory

developed by the Heritage Conservation and Recreation Service (HCRS).

Wildlife — During the past two years, the Department of Agriculture has moved aggressively to insure that wildlife values achieve a coequal status with other objectives included in its land management activities. This requires a level of cooperation never before reached between agencies. Agencies were directed to state wildlife goals explicitly in the land planning process. A comprehensive Department wildlife policy statement is being developed to guide pro-

grams. Many actions described elsewhere in this report will have major benefits to wildlife, such as "Channel Modification Guidelines," which make the practice an action of last resort, thereby reducing potential damage to wildlife habitat.

Another major responsibility of USDA is to carry out the provisions of the Endangered Species Act, which call for protecting the habitat of endangered or threatened species. The Secretary of Agriculture is a member of the Endangered Species Committee and participated in the determination on Tellico Dam and Grey Rocks Dam. The Congress overruled the panel decision not to complete Tellico Dam, which threatens the endangered snail darter.

Department research is identifying the critical habitat of threatened, endangered, rare, or unique plants and animals. Studies involve three species of fish, six species of mammals, and nearly a dozen species of birds. Technology is being developed to improve practices such as biological control to increase the populations of these species in their critical habitats, and management of fires to maintain critical habitats. For example, studies on the redcockaded wood-pecker have refined descriptions of nesting habitat, determined home

range and territorial sizes, and provided new information on reproductive behavior and the general biology of the species.

In President Carter's 1977 Environmental Message, he directed the Secretaries of Agriculture, Interior, Commerce, and Defense to accelerate the identification and protection of critical habitats for endangered and threatened species on lands under their jurisdiction. The agencies were required to identify critical lands and to submit recommendations to either the Secretary of the Interior or Commerce for a determination of critical habitat. For many of the 61 listed species on National Forest land, the necessary information is already on hand; key areas have been identified, or the key attributes of occupied range are known. Occupied habitats are being protected. The substantive requirements of the President's directive are being met in daily practice.

Another matter of concern involves the massive illegal trade in wildlife. At the direction of the President, USDA is working with Departments of Justice, Interior, Customs Service (Treasury), and Commerce to investigate the illegal trade in plants and animals and to take aggressive corrective actions.

It is now generally recognized that predators play an important role in our ecosystem. This Administration has reaffirmed its support of the existing Executive order

which prohibits the routine use of poisons for killing predators on public lands. USDA worked with Interior in the review and development of new policies for the Animal Damage Control (ADC) Program, which focuses on environmentally sound and humane means for assisting the livestock industry in dealing with the problem of predators.

Cultural Resources — The cultural resources of our Nation constitute a valuable and nonrenewable aspect of our environment. The responsibility of the Federal Government to protect and manage these resources has been firmly established throughout this century in legislation, regulation, and Executive orders. Some of the individual agencies of USDA have developed programs for the management of cultural resources. In 1979, the Department made a strong policy commitment to cultural resources and assigned Department-level responsibility for their management to the Office of Environmental Quality. This is an important step in integrating the concern for cultural resources into the total policies and procedures of the Department.

During the last year, USDA has taken a leadership role in the protection of our cultural heritage.
The Department has:



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- Participated actively on the Advisory Council on Historic Preservation (ACHP), the principal Federal cultural resource agency.
 - Appointed the Director of OEQ to act as the Secretary's representative to the ACHP, authorized by the 1966 National Historic Preservation Act to comment on Federal undertakings which may affect the cultural environment.
 - Contributed funds to and participated in an ACHP task force on archaeology to establish objectives relevant to that subject.

In response to requirements of the President's July 12, 1978, Memorandum on Environmental Quality and Water Resources Management and the regulations of the ACHP (36 CFR 800), *USDA issued final regulations on November 19, 1979 for the Protection, Enhancement, and Management of the Cultural Environment* (7 CFR 3100). *USDA was the first*

agency in the Federal Government to fulfill this requirement. The regulations:

- Set forth a departmental commitment to the management of the cultural environment.
- Direct USDA agencies to acquire cultural resource expertise and to develop direction for cultural resource management.
- Place departmentwide cultural resource responsibility in OEQ.
- Establish as USDA policy support for preservation of farms and rural landscapes and consideration of Native American traditional religions in planning.

The agencies of USDA which carry out activities that may affect heritage resources are developing and implementing their own internal procedures. Currently, several are preparing formal direction to implement the departmental regulations. Forest Service procedures were published in draft form in the Federal Register on September 18, 1979. SCS, APHIS, ASCS, SEA, FmHA, and REA are preparing draft regulations for review.

Ideally, inventories are conducted before the ground is disturbed, and communication with State Historic Preservation Officers (SHPO) and ACHP is established early in order to protect



the resource and comply with law. Early and careful planning makes it possible, in most cases, to provide cultural resource input during consideration of alternatives and before the final project direction is set. This protects the resource without unnecessarily halting or delaying a project. In fiscal year 1979, however, difficult conflicts arose between resource protection and project completion. In several cases, the decision was made to alter the project rather than destroy the resource.

In Cheraw, South Carolina, for instance, the SHPO informed USDA that a recipient of a Farmers Home Administration loan would adversely affect a National Register district by completing construction of a planned apartment complex. The agency stopped construction pending completion of study of an acceptable alternative site.

In southeast Nebraska, a Soil Conservation Service farm terracing project was stopped when a National register site was threatened. The farmer was advised of the conflict and, with SCS, developed and used an alternative crop management system.

The commitment of USDA to heritage resources will continue to grow in the future. Compliance is the essential first step. During the coming years, USDA will move beyond compliance to a total resource management approach. A total USDA program will include protection for the resource, training of personnel, public information and education, interpretation and enhancement—in sum, a planned approach to intelligent use and enjoyment of this nonrenewable resource.



V. Forest and Other Natural Resources

Forest Management — The President's Environmental Message of May 23, 1977, directed the Secretary of Agriculture to ". . . undertake a comprehensive study of the Cooperative Forestry Programs." In response, USDA prepared an interagency report titled "The Federal Role in the Conservation and Management of the Private Nonindustrial Forest Lands." This report included a review of the national importance of private nonindustrial forests, a discussion of the factors which may inhibit resource management on these lands, and approaches available to the Federal Government to stimulate the conservation and management of private nonindustrial forest lands.

Probably the most significant action undertaken by the Administration in the management of the Nation's forest resources was the development of comprehensive regulations for implementing the National Forest Management Act (NFMA). The regulations included new approaches for regional planning and for safeguarding certain environmental values. Specific limitations on areas eligible for clear cutting and buffer zones along streams are established to insure that environmental values are considered as much as possible during logging. Environmental assessment as an integral part of planning has been emphasized.

Off-Road Vehicles — Management plans were completed which designated areas and trails where use of Off-Road Vehicles (ORV) is allowed, restricted, or prohibited.

A planning committee, which included interested Federal agencies and the public, developed the program for a USDA-sponsored symposium in March 1980. It was designed specifically to review USDA policies and to provide suggestions on needed revisions. The ORV symposium was cosponsored by the University of Michigan and USDA. Excellent papers were presented.

Urban Forestry — Since January 1977, all 50 States (plus Puerto Rico, the Virgin Islands, Guam, and the District of Columbia) have initiated State urban forestry programs. These programs range from the broad and sophisticated to the minimal. The Forest Service provides a total of \$7 million to the States for technical assistance, which includes: planning, planting, care and maintenance, and development (during urban expansion). The States may subgrant the

money to cities, counties, and organizations, but all Federal funds must be matched by the recipients. Thirty-four of these 54 State programs resulted from this Federal funding.

Nearly 2,000 communities have been assisted through this program, and more than 100 full-time Forest Service employees, plus another 100 part-time workers, are involved. The \$7 million funded to this program has meant a \$14 million direct investment in urban forestry.

Energy Conservation — Early in 1979, the Rural Electrification Administration (REA) issued its Energy Conservation Policy along with guidelines supplying the information which should accompany land applications from distribution borrowers. Essentially, it recommends that:

- An energy conservation policy be adopted by the borrower's board of directors.
- Opportunities be identified to promote efficient use of energy and to set priorities for assistance to consumers.

- Training be provided to personnel to improve consumer services.
- Insulation standards be promoted.
- Consumers be helped to install alternative energy systems by making arrangements with the Farmers Home Administration (FmHA), community action groups, or local banks to finance conservation measures.
- FmHA agents work with local contractors to assure quality and energy efficiency.
- Cooperative members be advised about electric heating and air conditioning.

REA issued a handbook to help electric cooperatives conduct their energy conservation programs.

In January 1977, REA issued REA Bulletin 140-1, entitled "Load Management Program." It recommends measures to control the use of electricity in order to reduce peak demands and therefore minimize or delay the need for new generation projects, improve load factor, or otherwise help in utilizing resources to best advantage consistent with sound economics and acceptable standards of service. USDA issued the energy conservation manual for use in managing all of its offices, labs, and other workplaces.

Solar Energy Initiatives — The Farmers Home Administration funds solar energy heating systems for residential use when such systems can be shown to be feasible and cost effective. A demonstration project is underway to retrofit six existing homes with solar heating units.

Portable solar units are being tested nationwide to demonstrate their effectiveness for multiple use on farms. For example, the portable unit may be used for crop drying during the fall season and for heating the farmstead during the winter months.

Bio-mass Conversion — Increasing costs for energy will put new and different pressures on our natural resources. As we use more of our crops for bio-mass conversion, conservation of our soil and water resources becomes critical. We are entering an era of many unknowns. The value of crops for food and for energy production has never been in direct competition in the past. Large acreages of cropland could become involved very quickly if production of energy becomes economical—even for a short period of time.

Substantial demands will be placed on our croplands for the production of corn, wheat, and sugar crops to be used to produce ethanol for use in gasohol. The residue from the fermentation process may have potential for further use as livestock feed. If

substantial new acreages are brought into production, there may be additional erosion and water quality degradation unless special efforts are directed to insuring that these lands are converted in an environmentally safe way.

Department of the Interior-USDA Coordination — The President's 1979 Environmental Message called for closer coordination between USDA and the Department of the Interior on their program management. *An interdepartmental coordinating group has been established to accelerate the adoption of common resource terminology and classification processes, study co-location of office staffs, and initiate land exchanges which result in increased efficiency in administration, improved research coordination, etc.* These actions will provide a more uniform way of dealing with common resource problems and will reduce conflict between land users who work with both Forest Service and the Bureau of Land Management.



VI. Pollution and Health Concerns

Control of Pollution at USDA Facilities

Facilities — USDA has made significant progress in meeting the requirements of Executive Order 11752 and its successor, Executive Order 12088, which direct Federal agencies to comply with environmental pollution control statutes. The major statutes involved are the Clean Air Act and the Clean Water Act.

The Forest Service is the major USDA agency which manages Federal facilities. Over the past 3 years, the Forest Service has identified and either solved or scheduled to be solved its outstanding pollution problems. Many of these have been related to recreational facilities. A total of 111 pollution control projects has been initiated and \$17.3 million have been budgeted to implement them. The total cleanup of Forest Service facilities is scheduled for fiscal year 1980.

In addition to these direct efforts, the Department is engaged in a wide variety of activities con-

cerned with pollution and health including:

- Air Quality
- Water Quality
- Wastewater Treatment
- Acid Precipitation
- Solid Wastes Treatment
- Toxic Substances
- Integrated Pest Management

Several key departmental activities are highlighted as follows:

Air Pollution Control — The 1977 amendment to the Clean Air Act assigned important responsibilities to Federal land managers to protect air quality through 156 pristine areas in the Nation. The Forest Service is responsible for 88 of these areas, and is working with State governments and the Environmental Protection Agency (EPA) to improve air quality in these locations.

Proposals for new, major emitting facilities are being reviewed to see if their construction and operation will impair the air quality of the pristine areas. No adverse effects are expected for the facilities reviewed to date.

Air quality values related for Federal areas have been determined. Recommendations based on this new knowledge have been sent to affected States and reported to Congress. Also, as required by the Act, the Forest Service acted as a consultant to the U.S. Department of the Interior in determining the importance of visibility in the 156 pristine areas. Determinations were sent to EPA.

Water Quality — The Department has increased emphasis on water quality protection considerations both in connection with its Small Watershed Protection Program and its wide-ranging technical assistance and direct water quality activities. In addition, there has been a great increase in emphasis on using the Agricultural Conservation Program of the Agricultural Stabilization and Conservation Service to address water quality problems.

In connection with SCS projects, during 1977 through 1978 more than 250 water quality evaluations were initiated at a cost of \$3 million. The purpose was to assess

existing water quality, provide data for improving design of water structures, and evaluate cause-effect relations of SCS activities in water quality.

A Water Quality staff office was established in SCS to guide its participation in three water quality related technical assistance programs: the water quality planning activities being carried out under Section 208 of the Clean Water Act, the Model Implementation Program, and the Rural Clean Water Program.

The SCS, ASCS, FS, SEA, and ESCS have detailed employees to State Water Quality agencies, EPA regional offices, and the EPA national office to coordinate Section 208 activities.

Rural Clean Water Program — Nonpoint pollution is a major portion of the total pollution load in many of our river systems. Not all nonpoint pollution is caused by people, but much of it is. Public Law 92-500—the Clean Water Act—was amended in 1977 to include authorization for USDA to implement an aggressive Rural Clean Water Program. USDA developed rules to implement the Section 208(j) provisions, but Congress has not appropriated funds to implement the program.

The Congress did, however, appropriate \$50 million of funds to ASCS to implement an experimental Rural Clean Water Program. Regulations have been developed



to implement the program. The program is targeted at specific priority nonpoint pollution projects, to be selected by the Secretary with concurrence from EPA. Program leadership for the experimental program has been assigned to ASCS, with SCS providing leadership for the technical assistance coordination. Thirteen projects were selected on March 5, 1980 and announced by Secretary Bergland to initiate the USDA Rural Clean Water Program.

Water Quality and the Model Implementation Program — The Model Implementation Program is an effort to demonstrate how ongoing USDA and EPA programs can be focused directly on cleaning up the Nation's waters in rural

areas which are sources of non-point pollution. This effort resulted from a 1977 agreement between EPA and USDA. Seven projects in different States were selected for special funding, technical assistance, and monitoring. They began in 1978, and averaged 127,000 acres each. ASCS and EPA are providing special funding and SCS, Forest Service, and Science and Education Administration are providing accelerated technical assistance and education to this program.



Water Quality Projects Funded in 1979 — Forty-three project applications for special funding for water quality problems were received by ASCS. The Secretary announced the approval of 21 projects at a cost of \$4.3 million. The 21 projects ranged from one in Alabama intended to solve water quality problems caused by erosion, sedimentation, and animal waste, to a project in Nebraska to solve water quality problems caused by agricultural nitrates filtering through the soil into underground water supplies.

Safe Drinking Water — USDA is carrying out the provisions of the 1974 Safe Drinking Water Act in cooperation with EPA. A 1978 agreement allows FmHA to give priority to communities requiring assistance to meet the 1977 primary drinking water standards.

In Fiscal Year 1978, FmHA made 1,242 loans and 1,186 grants totaling \$472,682,100 and \$229,043,000 respectively to communities to construct new water systems or upgrade or expand existing systems. These projects are located in rural areas or cities and towns of up to 10,000 population.

USDA has taken steps to implement Section 1424(e) of the Safe Drinking Water Act, which establishes a program to protect sole source aquifers. Sole source aquifers are the only or principal drinking water source for an area which, if contaminated, would create a significant hazard to public health. USDA is coordinating its activities with EPA to insure that they are carried out in

compliance with the 1424(e) regulation.

Acid Precipitation — Atmospheric disposition and increased acidity of precipitation in recent years is of great concern to land managers, especially in the northeastern United States. Acid rain results mainly from the combustion of fossil fuels. Effects on forest and agricultural ecosystems are not yet well known, but increased acidity of lakes and streams is known to have deleterious effects on fish habitat.

The President's 1979 Environmental Message recognized acid precipitation as a serious global pollution problem. USDA has recognized this problem since the 1950's, and has been a leader in research on acid rain effects. USDA's research activities have focused primarily on effects on agriculture, forestry, and natural resources.

The President's message builds the framework for a comprehensive 10-year acid rain assessment program to be developed and managed by a standing interagency Acid Rain Coordination Committee. The committee is cochaired by the USDA and the Environmental Protection Agency and includes policy level representatives from the Departments of the Interior,

Energy, Commerce, State, the National Science Foundation, the Council on Environmental Quality, and the Office of Science and Technology Policy.

USDA's research in this area has been carried out through two mechanisms: direct FS and SEA research activity, and cooperative efforts with States and land grant universities. The USDA effort is coordinated through the National Atmospheric Deposition Program. It involves both effects research and monitoring, and embodies the most comprehensive acid rain monitoring system in the United States. It is anticipated that this program will be a central focus of the heightened interest in acid rain research. USDA plans to expand its monitoring capability as well as its research into the effects of acid rain and transport of air pollution.

The Office of Environmental



Quality recently helped support an international conference, the Action Seminar on Acid Precipitation, or ASAP, held in Toronto, Canada. This conference resulted in an exchange of information among scientists, public officials, and members of the general public, and is expected to provide useful input to decisionmaking on a U.S.-Canada air quality agreement.

Wastewater Treatment — The Federal funding agencies, including EPA, now endorse land treatment systems for the disposal of sewage wastes in small communities. They offer much lower initial costs, as well as lower operating costs compared to mechanical systems. Also, energy usage is much reduced and when projects are properly located, potential environmental impacts are lessened.

In 1978, FmHA made 460 loans and 278 grants totaling \$277,313,700 and \$74,866,660 respectively for waste disposal projects. FmHA and EPA have a joint policy to fund the most cost-effective sewage treatment alternative. In many small communities, land treatment systems are the most cost-effective system. For example, a small town in

Texas needed a central sewage collection and treatment system. The Council of Governments brought in a consulting firm which designed a system using mechanical treatment that would have cost \$1.3 million. The project was redesigned to a land treatment system. The simplicity of design allowed municipal employees to do most of the construction work. The project was completed for \$180,000 with the same end results in terms of environmentally sound attainment of desired treatment levels.

Solid Wastes — USDA, especially through SEA (Agricultural Research), has been heavily involved in the Nation's efforts to find environmentally acceptable means of utilizing waste materials. USDA has made major contributions to EPA's "Criteria for Classification of Solid Waste Disposal Facilities," which forms the basis for analyzing the public health and environmental effects that may be caused by solid waste disposal activities. USDA has provided specific inputs to the criteria for the application of solid wastes that contain heavy metals to land used for producing food chain crops.

An example of USDA's research in the solid waste area is its activities with cadmium. Cadmium, a toxic substance that can build up in plants, comes from the original parent material of soils, and from air pollution and the application of some solid wastes, and fertilizer.



Samples of cropland soils are being analyzed for traces of lead and cadmium by USDA under a cooperative agreement developed in 1978 with the Food and Drug Administration and EPA. The results are being used in setting action levels (levels that will trigger corrective actions by government). EPA also is gaining information from these studies that is helpful in selecting soils for application of sewage sludge with least impact on the environment. USDA is using the findings in advising farmers on practices to minimize the concentration of undesirable elements in crops.

Using Organic Waste — A USDA task force prepared the report, "Improving Soils with Organic Wastes," in 1978. About 76 percent of all organic wastes are associated with animal manures and crop residues; sewage sludge makes up 0.5 percent of the total waste. The report pointed out that opportunities to increase the effective use of organic wastes to improve soils include:

- Improving handling of manures to decrease loss of nitrogen.

- Applying manures that are now wasted.
- Applying crop residues that are not being fully utilized.
- Increasing the percentage of sewage sludge applied.
- Increasing the use of the organic fraction of municipal refuse.

The economic benefit of these actions could reach \$84 million annually.

SCS provides technical assistance to livestock producers in designing and installing animal waste management systems. ASCS provides cost-sharing assistance to eligible applicants. About 200,000 livestock producers currently need assistance. Since 1977, SCS has assisted in installation of about 10,000 animal waste management systems.

Treatment of Sewage on Lands — The disposal of sewage wastes poses increasingly difficult environmental and economic problems in the United States. Attempts are underway to develop environmentally safe and cost-effective methods of land treatment of sewage effluent and sludge on forest and associated lands.

Research at the North Central Forest Experiment Station has



focused mainly on treatment with effluent or sludge of a variety of species. Also, untreated wastes have been injected into selected soils. Results have been obtained on permissible rates and loadings of effluent and sludge applied to specific soil-vegetation sites, acceptable sludge applications for rehabilitating acid strip mined lands, and safe subsoil disposal of raw campground wastes.

In a study of the communities applying municipal effluent to land, it was found that development of the systems evolved by

farmers and municipal officials informally working together to solve waste treatment and water scarcity problems. Economic considerations, as well as political and legal factors, were important in system selection and operation. Seasonal limits on wastewater discharges provided cost savings when advanced wastewater treatment was required.



VII. Pest Management

USDA is committed to assuring an adequate supply of high quality food and fiber and a high quality environment for the American people, a commitment reflected in the establishment of the Office of Environmental Quality as the coordinator of USDA's environmental activities. This commitment is continually threatened by a great variety of pests which can damage the Nation's agricultural production, overall commerce, and public health.

Integrated Pest Management — Reliance on a single pest control method, such as a conventional chemical pesticide, does not provide the most favorable environmental protection, nor does it always provide lasting protection. Integrated Pest Management (IPM) offers the best approach to controlling pests without damaging the environment. An IPM system encompasses a range of technically and economically efficient pest management strategies, including chemical, genetic, biological, and cultural control methods. IPM systems can be used in all agricultural, forest, range, and urban ecosystems to achieve the national objectives of improving the production efficiency of agriculture and forestry, and enhancing agricultural and forest environments.

Implementation of Policy — Secretary's Memorandum No. 1929, December 12, 1977, recognized the importance of IPM systems. It affirmed that USDA resources will be directed to pest management, and delegated the responsibility to review the Department's pest management policies to the USDA Work Group on Pest Management. The Work Group comprises representatives of USDA agencies, and is chaired in the Office of Environmental Quality.

Current IPM Program — To be effective, an IPM system must be an integral part of management planning. It must consider carefully the potential for economic loss, risk to human health, damage to the environment, and energy needs. The success of the IPM concept requires public support of programs in research, education,

application and assistance, and regulatory action. A continuing program in basic and applied research is necessary to identify the pests and their natural enemies, and to develop appropriate control techniques. After this information is acquired, additional research will create the ability to forecast the effects of various control methods, to incorporate the economic aspect of pest control into IPM systems, and to make many other valuable predictions. This information must then be conveyed to all concerned, from extension workers and farmers to government decision-makers, to demonstrate the effectiveness of IPM systems.

USDA pesticide Impact Assessment Program — USDA's pest management programs take into account the needs of all segments of society. They try to balance the needs of gardeners, farmers, foresters and marketing people

with concerns for safety, the long-term impact and costs. The Department's growing partnership with other agencies helps it acquire the information necessary for balanced decisionmaking.

The Rebuttable Presumption Against Registration (RPAR) program of EPA, for example, was created to gather information on the risks and benefits of using pesticide chemicals. When there is a possibility that a pesticide chemical may be removed from the market because a specific level of risk has been exceeded, the RPAR evaluates the situation. Risk criteria include acute and chronic toxicity, and impacts of the chemical's use on organisms other than the targeted pest.

USDA provides the information used to weigh the risks versus the benefits. It has provided this information, or is in the process of providing it, for more than 30 pesticides.

After all the factors have been evaluated, the pesticide either remains on the market or is removed. This process insures adequate protection for both the environment and human health.

In its involvement in pest

management with other countries, USDA is guided by the same concerns and policies as those which guide its domestic programs.

Economics of Pest Management — USDA has initiated a project to analyze new biological and cultural IPM technology. The project focuses on the following areas:

- Assessment of economic aspects.
- Study of economics of overall pest management.
- Evaluation of economic feasibility of large area pest control and eradication programs.
- Assessment of economic feasibility of potential new quarantine and related programs.
- Assessment of environmental and health benefits.
- Application of cost-benefit techniques.
- Study of incentives and delivery systems.
- Development of new models to be used in conjunction with existing models to measure impact of new technology.
- Identification of institutional changes needed for adoption of biological and cultural IPM systems.

Biological Control — Congress has approved \$1.5 million for a biological control program for alfalfa weevil and Mexican bean beetle. A cooperative Federal and State effort will develop mass production and distribution techniques for parasites and demonstrate the practical use of biological agents in controlling these pests over large areas.

Forest Insect and Disease Control — Research has been completed on two programs to develop IPM systems for the Douglas fir tussock moth and the gypsy moth. The results of this research will help predict and detect outbreaks of these pests, and will help minimize the use of toxic chemicals.

Sprays containing a natural virus disease of the tussock moth and gypsy moth, developed by USDA, were the first two microbial insecticides registered to control insect pests in the United States.

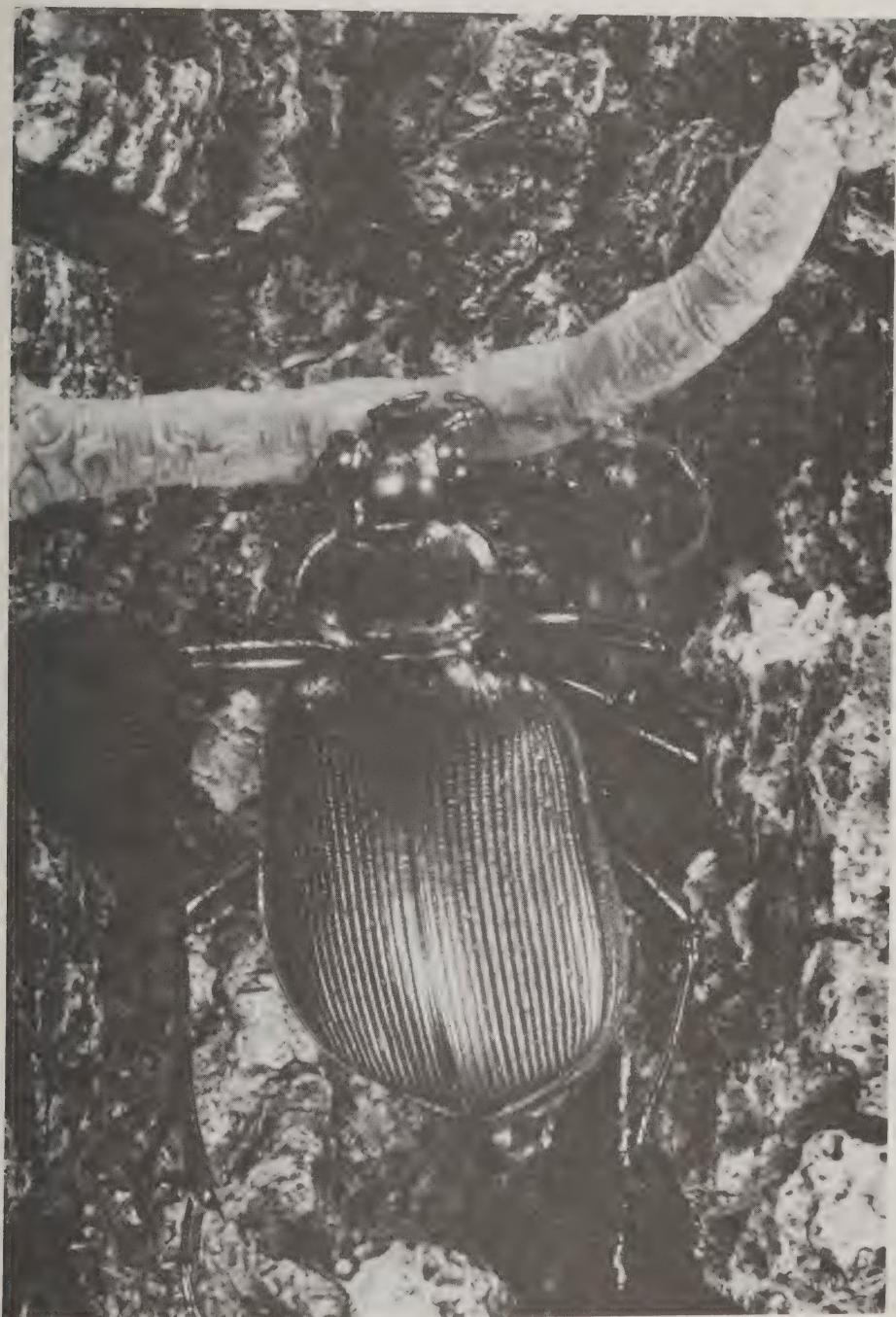
Forest Service Review of Pest Management Programs — The effectiveness of Forest Service pest management programs is being reviewed to insure that the tools used to control forest pests are consistent with USDA policy and with the Integrated Pest Management program called for in the President's Environmental Message. All pest management techniques will be assessed to guarantee that USDA programs are both as effective as possible and environmentally safe.

The Department's strong commitment to IPM systems is intended to eliminate nonessential uses of conventional chemical pesticides. To this end, the Forest Service is

taking two specific actions regarding the management of pest vegetation:

- It has developed specific criteria for the use of 2,4-D. To protect the environment, the Forest Service is adhering rigorously to these criteria to insure that the application of this chemical is limited to the most essential uses.
- It is developing an IPM approach to the problem of pest vegetation. To determine the most effective organization for dealing with this problem, the Forest Service is reviewing current programs thoroughly and recommending alternatives. There are two major alternatives: One involves transferring policy and technology, conducting pilot programs, and evaluating technology and operating procedures; the other involves supporting research in pest vegetation, studying the effectiveness of various control methods, and determining the need for treatment.

On January 8, 1980, the Forest Service published in the Federal Register criteria for the use of 2,4,5-T and other pesticides containing TCDD and 2,4-D. All uses of 2,4,5-T on National Forest lands must be approved by the Assistant Secretary for Natural Resources and Environment.





VIII. Environmental Agenda for the Eighties

Environmental challenges will continue to grow as we enter the new decade. Emerging energy conflicts, increasing awareness of the need for better pest management techniques, growing pressure to convert prime farmlands to other uses are important aspects of a challenging decade.

The following represent some of the priority actions facing USDA for the decade of the eighties:

- Practical field application of NEPA, the National Forest Management Act, and other environmental laws.
- Protection of our natural heritage through expansion of the national wilderness and wild and scenic rivers systems and through preserving other places that have special ecological, natural, cultural, historic, and scientific value.
- Completion of the National Agricultural Lands Study and implementation of its recommendations for retaining agricultural lands.
- Reduction of erosion and improvement of water quality.
- Conservation of both surface and groundwater supplies instead of continued new development.
- Development of integrated pest management systems for all forests and rangelands, and major agricultural crops.
- Monitoring the increased erosion hazards of bringing "marginal" or "fragile" land into production with expansion of crop and forest lands for energy resources and educating the public about the risks.
- Implementation of a program of total management of the cultural environment—including not only compliance with relevant laws and regulations but also development of a program for inventory and evaluation, protection and preservation, use, interpretation and enhancement for the education and benefit of the American people.

The agenda for the eighties presents a challenge to all USDA agencies to include environmental concerns as an integral part of program development. Many risks and uncertainties remain. Protection of our natural resources depends on our ability to foresee these needs far enough in advance to develop effective strategies to handle them.



IX. USDA Salute to NEPA

On January 17, 1980, USDA saluted NEPA and the environmental commitment it inspired. At this celebration of NEPA's tenth anniversary, several distinguished speakers related their experiences with the Act during its first decade. The texts of their speeches follow.

Statement of Dr. M. Rupert Culter, Assistant Secretary for Natural Resources and Environment, Department of Agriculture

I would like to welcome you all. The Department of Agriculture is pleased to salute the tenth anniversary of the National Environmental Policy Act, familiarly known as NEPA, this Nation's single most important environmental law.

We know NEPA has produced significant improvement in how we make decisions affecting the environment. Many of you here, today, have been active in the development and implementation of NEPA and in environmental quality programs generally.

We are honored that our non-USDA guests would join us to salute this important law, examine our environmental progress and accomplishments, and discuss the future challenges. I hope you will take time to see the exhibits and get acquainted with the many aspects of USDA programs related to environmental quality.

Among the publications available is the draft of the first annual report of the USDA Office of Environmental Quality. This report is an attempt to summarize the work within the Department of Agriculture that relates to environmental quality. It is a supplement to the Council on Environmental Quality Federal Governmentwide environmental quality annual report.

I would like to take this opportunity to thank the staff of the Office of Environmental Quality, and the Department's Environmental Quality Committee representing all of our agencies, for their good work in organizing this celebration, and to give my special thanks to Mr. Rado Kinzhuber, the chairman of the committee to put on this event.

It is a rare privilege for me to share the platform with this distinguished panel of speakers. They represent, very adequately in my opinion, all of those who were key actors in the process of drafting, introducing, debating, passing, implementing, interpreting, and using the National Environmental Policy Act of 1970, a law which has changed, in a very basic way, how Federal agencies go about their business.

As one who wrote his doctoral dissertation on the subject of Forest Service litigation — experience which comes in very handy these days, I have found — but who does not have a law degree, I find myself the only nonlawyer among your speakers. The others are graduates of the law schools at Georgetown (Mr. Dingell), Columbia (Mr. Train), Harvard (Mr. Terrell), and Yale (Mr. Speth). I will attempt to represent those of us concerned with ecological substance, as contrasted with legal process!

This is a year for major birthdays: the 75th for the Forest Service, the 45th for the Soil Conservation Service, the 10th for NEPA, and the 1st birthday for USDA's Office of Environmental Quality. I hope we can have many more birthday celebrations like this, and that they are all as successful as this one.

The signing of the National Environmental Policy Act on New Year's Day in 1970 ushered in the Decade of the Environment. The speakers today are among the prime movers who made that prediction come true.

In the 1970's, we worked together to develop and implement a comprehensive and workable environmental policy for the Nation. We put in place strict but enforceable laws to minimize air and water pollution and protect human health.

We established the first Federal environmental standards for surface mining and reclamation. We provided for the protection of plant and animal species threatened with extinction. We reaffirmed our concern for the global environment. We acted to preserve the Nation's natural heritage through the establishment of wilderness areas and wild rivers. We brought about significant new laws to control the use of pesticides and other toxic substances.

We are here, not to mourn the passing of the environmental decade that began with NEPA, but rather to celebrate the beginning of the Action Eighties. The decade just ended left us with a legacy for future action.

NEPA is still on the books and growing stronger with each court opinion. We have only begun to address it fully, and to build from its example. It is a law which declared a sweeping environmental policy where none existed before, which required that the Federal Government predict and consider the environmental consequences of its actions, and which established an environmental policy co-ordinating body in the Executive Office of the President.

NEPA, generally regarded as the single most important piece of Federal environmental legislation ever enacted, was quickly copied by many States in a tide of little NEPA's. It became the cutting edge of a citizen-sponsored en-

vironmental reform movement that gave it support, momentum, and impact.

To the general statement of environmental policy which NEPA provided, Congress has added significant legislation that addresses more specifically the broad array of environmental problems afflicting us, from toxic substances to surface mining, to water development, to endangered species, to national forest land management planning.

We have legislatively fleshed out an environmental policy for the Nation. The burden of environmental improvement, now, has been passed from the policymakers to the platoons of scientists and land managers who must put these laws into practice.

We resolve to implement these laws and make them fully effective in the 1980's. Effective implementation is not an easy task, but what is particularly notable about the National Environmental Policy Act is that after 10 years of implementation, the creative and innovative intentions of policymakers have not been diluted or deferred in the transition of policy to practice.

The new environmental policy which NEPA established has infiltrated the most remote recesses of the Federal agencies, and now influences many of the decisions we make.

NEPA will have a lasting impact upon our way of doing business in the Department of Agriculture.

For one thing, the environmental impact review process has been woven into the fabric of our programs.

As in any bold departure from previous direction NEPA has been both praised and damned but after some initial resistance, USDA agencies have accepted responsibility for full NEPA implementation, recognizing that it simply represents a good planning process.

The Forest Service and the Soil Conservation Service have made the environmental review procedure their primary mode of decisionmaking, thereby insuring that the environmental consequences of all decisions are well considered.

Implementation of the Act has brought the public into our decisionmaking processes and given America's citizens and their groups more influence over the final decisions. Citizens become involved directly through agency planners and also, indirectly, through NEPA-based litigation. How many environmentally questionable proposals have been rejected or modified within the agencies because of anticipated public objections and the possibility of

litigation? Many, I am sure.

We also have been working directly to forestall the necessity of litigation by removing any shreds of administrative procedure that shelter our decisionmaking, and by helping everyone who is affected by the results of our decisions to become part of the decisionmaking process.

In our RARE II study, for example, we did our best to make the process one which the public could understand, participate in, and influence. We involved the public from the beginning and throughout the study and received more than one-quarter of a million public responses to the draft environmental statement.

In our long term planning programs under the Soil and Water Resources Conservation Act and the Forest and Range Land Renewable Resources Planning Act, the public is helping us determine future conservation programs for at least eight USDA agencies.

Through the Resources Conservation Act, we have held more than 9,000 public meetings and considered thousands of public concerns and suggestions leading to draft documents issued for another round of public scrutiny.

Public involvement will continue to have a positive effect upon our programs. The public wants it so. A Harris poll just completed for the Department on soil and water conservation shows that the public highly values participation and the machinery for broad participation.

By four-to-one, says our Harris survey, the public chooses putting up with some delay in order to let some people have a say in the big decisions rather than getting things done quickly at the expense of citizen input.

According to this USDA-sponsored survey, 79 percent of the people feel that we should be moving toward a country which gives many chances for citizens to have a say in Government decisions, and which expects its citizens to give some of their time to politics; 10 percent feel we should be moving toward a country which does not have such expectations.

The knowledge and expertise of this public on environmental issues has increased. Environmental education programs are having an effect. Conservation groups have increased the expertise they bring to bear on our decisions. They have built a commendable record

of competence in assessing the environmental impacts of the alternatives we offer and in helping us choose the best course.

Last year when we developed National Forest Land Management Planning regulations to implement Section 6 of the National Forest Management Act, members of the public worked shoulder-to-shoulder with us, with the scientists on our Committee of Scientists, and with the Forest Service staff who helped develop the regulations. This public involvement was helpful and influenced the content of the final regulations.

The NEPA process has forced USDA agencies to consider broader decision criteria, to assess the impacts of their actions on the total human environment, and to consider many options to the most obvious course of action. Some of these criteria, assessments, and additional options are the result of public comment. Others emerge in the interagency review process.

The bottom line, the sum of these impacts of NEPA on the way we do business, is that we are making better decisions because of this law, decisions which weigh a broader range of options, which consider the environmental consequences as well as other implications, and which are more acceptable to the American public.

NEPA has created a positive momentum for environmental consideration which has been felt in all aspects of USDA's programs.

In the midst of reorganizing the agencies within USDA, for example, we have added a new one, the Office of Environmental Quality, to underline our commitment to a quality environment. This Office will serve as a focal point for the many environmental matters within USDA.

Let me list some specific manifestations of the changes in USDA which NEPA has fostered.

The new National Forest Land Management Planning regulations, the NEPA interdisciplinary analysis process applied to public land management, are in effect.

We have rewritten the standards and specifications for many Soil Conservation Service and rangeland conservation practices, to expand and emphasize guidance for environmental concerns, and to broaden our helpfulness as well as our view of rangeland values.

The Soil Conservation Service has worked with the Fish and Wildlife Service to develop channel modification guidelines, so that we protect the environment while helping to improve stream productivity.

We, and other Federal agencies, are cooperating with Mexico to address the problem of desertification in the arid and semi-arid lands of the West.

We have issued interim policies and procedures calling for consideration of nonstructural as well as structural alternatives for flood plains protection. We have sped up the development and use of integrated pest management practices to protect adequately the forests and crop lands of the Nation against significant pests, with the least hazard to human health and to the natural environment.

NEPA is remarkable in that it requires specific consideration of alternative futures. It incorporates a systematic and interdisciplinary approach to planning, to show the relationship between the local short term uses of human environment and the maintenance and enhancement of long term resource productivity.

This is an aspect of NEPA that needs more emphasis, the consideration of alternative futures. The most desirable future may not always be a continuation of the status quo.

NEPA represents a challenge yet to be met. Can our environmental planning be both imaginative and flexible enough to meet the unexpected? It can, and it must be.

During the decade since NEPA became law, environmental considerations have come to shape policy and action in ways and to a degree we little expected or knew before.

We are now at the threshold of a new and exciting decade. Problems of optimum land use, environmentally sensitive energy use and development, and resource conservation confront us. Their solution will not come easily, for without prolonged and intensive public discussion, we will repeatedly be brought face-to-face with fundamental questions about the ability of our society to satisfy our growing demands for goods while protecting the productive capacity and the beauty of the land.

At the dawning of the Action Eighties, we are ready for a new era of environmental protection, an era which reflects maturity of commitment, an era which integrates knowledge with that commitment and gives the environmental protection effort the sophistication, lasting relevance, and creative energies needed for the perilous years ahead.

I would like to thank you all, speakers and other guests, for helping us celebrate NEPA's tenth birthday.

Statement of the Honorable John D. Dingell, Representative in Congress from the State of Michigan

I would like to commend you all and thank you for celebrating 10 years of the existence of the National Environmental Policy Act.

I would also like to say that it is highly appropriate that we should celebrate NEPA's tenth birthday here, since the Department of Agriculture is a body which has so much to do with the quality of human life and environment inside the United States.

It is nice to see what a sickly infant, long in gestation and very weak from its beginning, has grown to be. Unfortunately, like most youths entering their young teens, it is still much misunderstood.

A lot of people think that

NEPA is some kind of water pollution, air pollution or antipollution law, and they think it is administered by the Environmental Protection Agency. They often refer to it as the "National Environmental Protection Act," which it is not. They think that it has substantive impact, which, in fact, it does not.

The history of NEPA is most interesting. The concept embodied in NEPA was recommended in one form or another by a number of people. Believe it or not, back in the thirties or forties, Senator Jim Murray first suggested that something of this kind be done.

I was unaware that it was his idea when I first introduced the National Environmental Policy Act, which was initially intended to establish a Council on Environmental Quality. The provisions of Section 102(2)(c), the Environmental Impact Statement provisions, which have turned out to be the most important provision of the Act, were not introduced on the House side originally, but were introduced by Senator Henry Jackson in the Senate as a result of the interest and urging of concerned environmentalists.

The Honorable John D. Dingell is a Member of the U.S. House of Representatives from Michigan's 16th District. A Member of the House since 1955, Mr. Dingell chairs the Subcommittee on Energy and Power of the House Interstate and Foreign Commerce Committee, and is a ranking member of the House Merchant Marine and Fisheries Committee.

Mr. Dingell played a key role as a leading House sponsor of NEPA, winning Merchant Marine and Fisheries Committee jurisdiction by introducing NEPA as an amendment to the Fish and Wildlife Coordination Act and bringing it to the floor for a successful vote.

What arose was NEPA as we know it today, but that is long after the first work began. The legislation was first referred to the Committee on Interior, which demonstrated a lack of interest in the legislation.

Ultimately, by reason of a consultation between two good friends, Wayne Aspinall, Chairman of the House Interior Committee, and Congressman George Miller, the matter was rereferred to the Committee on Science and Technology, where it would have a happier home.

To my regret, and surprise, although rather less surprise than regret, it turned out that it had no happy home. Although hearings were held, nothing ever transpired.

In the passage of time, it occurred to me that a really happy home would be a committee with broad environmental jurisdiction which had not really interested itself in this matter until this time. The Committee on Merchant Marine and Fisheries, where I just happened to be chairman of the subcommittee on Fisheries, Wildlife Conservation and the Environment, had jurisdiction over a little piece of legislation known as the Fish

and Wildlife Coordination Act, which is known, I think, to many of you in this room.

Curiously enough, about that time, the Presidential race was heating up on the Senate side and on the House side, and a number of people were becoming quite interested in the question of environmental quality.

It took relatively little time for the legislation to clear both the House Committee on Merchant Marine and Fisheries and the Committee on Interior in the Senate. The House bill then wound up in the Rules Committee at about the same time the Senate bill passed the Senate floor.

The House bill, unhappily, ran into a roadblock, the character of which became apparent to me only after some passage of time. In any event, nothing happened. Happily, we had a wonderful fellow as Speaker of the House by the name of John McCormack. John, at my request, kept the Senate-passed bill at the clerk's desk when it came from the Senate to the House, rather than referring it to the Interior Committee, where its prospects did not look good. It was then possible for us to arrange the passage by unanimous consent of a similar bill in the House by substituting the House-passed language for the Senate-passed language. This meant some rather difficult negotiations with Chairman Aspinall.

Of course, there were also certain problems in terms of the temper of the conference. This being one of the first bills of any size on which I had worked, I tried to move too fast in some matters. We had to go back and retrace our steps.

Ultimately, the matter got down to the White House. This was late in the year 1969 with the decade of the seventies coming up. It appeared that there were very few people who knew precisely what NEPA would do.

I have to say that the Administration had rather mixed views. Different departments would state different things at different times. During the time of NEPA's consideration and passage the Administration had attempted to establish an executive level interagency panel which had the same objective as the Council on Environmental Quality as proposed by the legislation. As a result, I did not look with very much hope on the idea of there being any big bill signing ceremony in the Rose Garden, and not just because it happened to be cold on January 1st of that particular year.

To my great surprise, I found that the President had signed this bill with the appropriate statement indicating that this was going to be the Decade of the Environment. The decade of the seventies would see us entering an era of vast concern about the environment and movement to resolve the problems

which existed in environmental quality.

Well, getting the infant off to its start was quite difficult. The bill had been much reduced. The statement that every citizen is entitled to a wholesome environment had been removed as a part of the understanding with Chairman Aspinall; the Council on Environmental Quality, the annual report, and Section 102(2)(C) remained.

I am happy to report that the panel of the CEQ was selected, two members of which I see here — Bob Cahn and Russ Train. The panel had kind of a rocky road to go at first, because nobody knew what size it was to be. We had a great discussion about whether there should be 3, 5, 11, or 12 members.

We finally settled on three, and the President selected three outstanding persons to serve on that panel.

The first annual report was quite an event. Then began a series of pieces of litigation under the new Act.

As you will all recall, there was a relatively minor permit on the Alaskan oil pipeline, which was

held up because an Environmental Impact Statement had not been filed. That led to lengthy litigation and, finally, action by the House of Representatives, and the Senate sent a bill to the President, saying that the Environmental Impact Statement was adequate, the proposal was good, and the contractors could build the Trans-Alaska pipeline.

Since that time, there has been a number of other decisions. Yet, NEPA has to be recognized as being, in truth, a very simple statute. It just says that you must find out all the consequences of what you propose to do. You set them out very plainly, so that everybody can understand what the consequences are. It does not say that you cannot do something because it has bad environmental consequences.

Now, the environment was a matter of some concern to us. We tried to define what it was. Finally, it came to be understood, by those of us who worked on the legislation, that it was the fullness of human experience. It was whether or not you deal with a slum. It was whether or not the action that you take happens to have some kind of adverse environmental impact, or

whether it happens to have some kind of a direct impact on minor fish, or on some great and precious tract of open space.

The consequences of our action — characterized by about 10 years of experience which you and many others throughout Government and industry and private life have had — have been good, I think.

This does not mean that there are not problems with NEPA. The problems that lie before us are going to focus very heavily on NEPA and our concern for the environment.

In the 1980's, we are not going to have the nice, happy, comfortable years of the sixties, or of the early years of the seventies. We are going to have times of energy shortages, times of international turmoil and difficulty, and we are going to have a situation in which the United States is not going to be the dominant force on the earth.

The fact of the matter is that this country is going to have to learn to fine tune not only its decisionmaking process, to make it faster and better, but its tools, such as NEPA. It is going to have to see that they are used not only to protect and to enhance the environment, but also to come expeditiously to the conclusions that will best suit our national decision-making process.

Remember that we are not talking about arriving at a perfect environmental decision, which NEPA does not require, but simply a full disclosure of that which we do.

I look to the future with concern, not because NEPA is going to be misused, which occasionally it will be by both its friends and its enemies, but because the times are going to be enormously difficult, and because the errors and the penalties that we will face as a result of those errors are going to be enormous during the eighties.

We are going to have to try to move rapidly toward conservation of finite resources and toward the use of renewable resources. We are going to have to see to it that the NEPA process becomes something which will enable us to move better in that direction.

I have expressed one concern which I think you should carry with you at this time as do I at almost all times: NEPA is a wonderful tool. It is, however, merely a tool. It is not an end in itself, but rather a means to achieve and to assure a good environmental ethic and a good environmental application of our laws. Its purpose is not to assure that this nation will create a select breed of environmental impact writers who will write statements of great profundity that are little read. Its purpose is to incorporate into the decisionmaking process the fullest and best appreciation of all of the environmental conse-

quences, so that a judgement can be reached by the decisionmakers for the benefit of the people that will give them confidence and hope in the openness of their Government.

There is going to be great difficulty in this country, as I mentioned. I will not treat that, because it is not my function here. But it is my function to remind you that in the 1980's NEPA, with very few changes because of the simplicity of its language and the unique purposes of Section 102, is going to have an enormous place in seeing to it that the decisions that this nation makes are made wisely, on the basis of full information.

It is my hope that those who will be using this tool will appreciate it to the fullest and will use it for the benefit of the country.

**Statement of Mr. Russell E. Train,
President, World Wildlife Fund, Inc.**

I think it was John Dingell who mentioned that this statute, the National Environmental Policy Act, has remained substantially unamended for 10 years, and it has been at the very center of decision-making and ferment, if you will, in the executive branch of the Government during all that time, which makes it even more remarkable.

It is a pleasure to be here with Mr. Dingell. He has been called the "father in the House" of the National Environmental Policy Act, and that he most certainly was. Perhaps even more important insofar as my particular job was concerned, he did not turn his back on the legislation once it was

As the first Chairman of the Council on Environmental Quality, Russell E. Train assumed responsibility for drafting the first set of guidelines to interpret NEPA to the executive branch.

A former Administrator of the Environmental Protection Agency (1973 to 1977), Mr. Train has also served as a U.S. Tax Court Judge, founder and organizer of the African Wildlife Leadership Foundation, President of the Conservation Foundation, and Under Secretary of the Interior (1969 to 1970). He is now Chief Executive Officer of the World Wildlife Fund in the United States.

off the Hill. He continued in a very sharp, inquiring, and aggressive way to maintain oversight of the operation and implementation of NEPA through the Merchant Marine and Fisheries Committee.

I must say that it was an oversight I always welcomed. It was not always easy, but I always knew I had an ally during a time when we needed allies.

Let me say another few words about the early history. Before the enactment of NEPA, I had the opportunity as President of the Conservation Foundation to work on ways to get environmental values into decisionmaking. In this process, I had a good many contacts with Congressional staffs. Indeed, I worked at that time, off and on, with the staffs of the committees, particularly with the Senate Interior Committee, on the development of what eventually became the legislation, NEPA.

When I came into the Government as Under Secretary, environmental policy and concerns were already high on the agenda, and it was not just the watershed of the National Environmental Policy Act which suddenly made us all become very environmental.

I recall major environmental issues before the Department of the Interior at that time. One was the Alaskan pipeline, and that issue was dumped on my desk in April of 1969, I think it was, in terms of a request for a right-of-way permit. I was told that that

permit had to be granted by the 1st of July of that year, or disaster would confront us all. Another issue was the Everglades Jetport.

Both issues revolved around environmental impact.

I mention this just to show that, clearly, both in the executive branch and in the Congress at that time, environmental values had already come pretty much front and center.

Having had something to do with the development of the legislation prior to coming into Government, I then had the interesting situation of testifying on behalf of the Administration in opposition to the National Environmental Policy Act on the Senate side.

The Administration had established, at the very beginning, an interagency committee on environmental quality and felt that that was the only mechanism needed to pursue and bring together the Federal Government's interest in this whole issue.

As you all know and I certainly have learned as an old bureaucrat, interagency committees are great for arriving at the lowest common denominator of the various interests involved, but seldom can be considered what you might call a "cutting edge" of policymaking, and they certainly do not provide leadership.

I had great misgivings about the process we had established in my Administration; however, I

swallowed my misgivings and I testified, as I said, in opposition to the establishment of the Council on Environmental Quality.

Interestingly enough, as John [Dingell] has mentioned, nobody really paid much attention to the Environmental Impact Statement process established by Section 102. The debate focused on what was really the institutional question of whether there should be a council or not.

Somewhere along the line after my testimony on the Senate side, we had further discussions in the Administration, probably because it became apparent that this bill, or a form of the bill, was going to pass anyway.

I was then able to testify before the Committee on Merchant Marine and Fisheries in a modified manner. I gave qualified support to the Council, which then passed toward the end of that year and became law on the first day of January, 1970.

For my sins, my chickens came home to roost, and I became the first Chairman. I did not have an

office at that time. I was joined by Bob Cahn and Gordon MacDonald, the other two members of the Council. We occupied the office I had as Under Secretary of the Interior, and that is where the Council on Environmental Quality got organized.

We had a staff of about three at that time. We stayed there a couple of weeks until we were able to demonstrate our new environmental clout by kicking the Bicentennial Commission out of its offices on Jackson Place. We took those over.

The President had promised me that when we were confirmed and we had our press conference, in what was then known as the "fishbowl," we would be in the Executive Office Building just like the Council of Economic Advisors.

I think it was that same afternoon that Bob Haldeman called me up and said that he was sorry that that was not going to happen. I learned the power of the staff at the White House very quickly, but in recompense for that, we got very good space there on Jackson Place.

I think it is fair to say that the Environmental Policy Act has

brought about over the years what I consider the most significant revolution in decisionmaking in our Government in history.

In implementing NEPA we, in fact, were starting from ground zero. We had to build a staff. We had to get money. We had to try to understand what the statute meant. I think, frankly, nobody had much of a clue, certainly not on the EIS process. Even then, we had no real idea of the implications of the Environmental Impact Analysis Process requirement.

So, we started writing the CEQ guidelines with input from everywhere we could get it. We got those out in fairly good order and then began to push the various agencies to get their rules out. We recognized that there had to be and would be differences among the various agencies, and we were probably a little uncertain of the clout we had in terms of telling all of the 30 or more agencies we were dealing with what they should be doing beyond our general guidelines.

The most difficult problem, without question, for all of us in those early days was what I think you could call the intransigence of the bureaucracy, almost all agencies, in really committing themselves to this new requirement of the law.

They could not really believe it. All they could see was that NEPA posed a very real threat to

established ways of doing things, and perhaps more important, felt a real fear that it posed a threat to the very functions that they themselves were involved in carrying out.

A great deal of this, I think, was just simply lack of familiarity with the problems and fear of the unknown, because as time has passed, those early fears have been largely dissipated.

But NEPA has the very unusual requirement of considering all alternatives to a proposed action, and as agencies quickly discovered, these alternatives included the responsibilities of other agencies. It is very hard for a bureaucrat to decide or propose that the particular program of his or her own agency should be set aside and some other agency's program be adopted, or even more difficult, perhaps, to do nothing at all.

In those days, we had very strong support from the White House, and from the Domestic Council staff. Again, I do not think they were entirely familiar with NEPA. I suspect that if anybody knew in advance just exactly what kind of a revolution was underway, there would have been a lot more opposition then.

I recall that one time at a Cabinet meeting early in 1970—I was attending Cabinet meetings then; I did not later on in the Nixon Administration—I was asked to explain the workings of the EIA process.

I did. I was given two minutes, or something like that. I took as my example the safeguard missile system, then proposed, by the Department of Defense. I probably could not have picked a worse example in that room at that particular time.

I saw Mel Laird's jaw drop about a foot. I explained to him that he was going to have to do an environmental impact analysis and set out all the alternatives for public discussion, disclosure, and so forth.

I was never asked back to a Cabinet meeting.

But I suppose I might say that I got the Cabinet's attention. Be that as it may, I think that getting NEPA off the ground was done with the usual rough edges. We did do it, I think, very successfully. I will add that we did it with the absolutely essential assistance of the private sector, citizens involved in these issues all over the country, and very important, with the legal process and court decision.

Without all of that assistance, I think that NEPA would never be what it is today. It took that kind of initiative from outside and interpretation by the courts to give

the legislation the teeth and reality that it ultimately had.

I have to end by talking not about getting off the ground, or the past, but looking ahead a bit. I think we all should.

I agree with John [Dingell] that the National Environmental Policy Act is going to remain a central force and a central tool for us to use in dealing with the increasingly difficult problems in this decade now before us, problems of resource allocation, of quality of life.

The vital interests of this Department can cut across many sectors of American life. Take the problem of loss of soils, for example. I am now a part-time farmer, and I watch that soil running off into the Chesapeake Bay, and I read the statistics that this is something like nine tons an acre around the United States per year. This is the kind of problem for which the National Environmental Policy Act should be providing a very strong tool.

From my own present perspective with the World Wildlife Fund, our interests lie very heavily out-

side of the United States. I would point out in closing that an extraordinarily significant dimension of NEPA and the environmental concern that this country must have extends to the health of natural systems beyond our borders.

The oceans are an obvious example. The tropical forests of the Southern Hemisphere are another, enormously important example. In our lifetime—if current rates of destruction of those forests around the world continue—we face the loss of substantially all of those forests within 20 years. With them, we will lose around 2 million or so species of life, about one-third of all species that have come into existence on the face of the earth since the Creation. Plant and animal life would go in those 20 years or so as these forests are destroyed. Their loss will very probably leave a major impact on world climate. Perhaps we will not be able to grow wheat in Kansas.

These are the kinds of impacts that arise when we start considering resources of global significance, such as the tropical forests. For anybody to say that the United States has no stake in these things and that our sights must be confined to within our political boundaries is absolute nonsense. It is nonsense that is also madness, because our fate is inextricably bound up in these issues.

Thank you very much.

Statement of Bruce J. Terris, Private Citizen, Law Offices of Bruce J. Terris

It is a pleasure to be here today. A lawyer who makes his living suing Government agencies is not very often invited by one of those agencies to speak at a celebration of one of the statutes on which he relies to sue them.

I think it says a great deal, at least I hope it says a great deal, for the Department of Agriculture that it has so warmly embraced its obligations under NEPA that it is having this ceremony.

I do, however, remember *Sierra Club v. Butz*, in which we obtained an injunction against the RARE I program because of the failure of the Department to comply with NEPA, and another decision by a court in California just crossed my desk which suggests that the Department did not comply with NEPA in RARE II. While the Department tried, these cases at least suggest that there is perhaps

A Detroit native, Bruce J. Terris was responsible for helping to create body of case law resulting from NEPA-based litigation. He has brought to court such definitive cases as Sierra Club v. Butz and West Virginia Division, Isaac Walter League of America v. Butz.

Mr. Terris served as assistant to the Solicitor General of the Department of Justice (1959 to 1965), is a cofounder of the Center of Law and Social Policy, and worked closely with Robert Kennedy. He is now an environmental attorney with his own law offices.

more progress to be made.

I do not think that I am denigrating the great contribution of Congressman Dingell and Senator Jackson by saying that they did not fully know what they were creating when they had the genius to start NEPA along its way. When NEPA was passed, it looked like one of those statutes which set forth pious hopes and pious goals that have no effective mechanism for carrying them out.

This general, perhaps even vague statute has somehow been converted into an effective instrument for protection of the environment. I believe this has occurred because of the enormous commitment of citizen groups and because of the willingness of the Federal courts to vigorously enforce the statute.

The willingness of citizen groups and individual citizens to participate in the NEPA process has, in my opinion, been truly extraordinary. Thousands and thousands of citizens, probably tens of thousands of them, most of them volunteers without compensation, have read and studied voluminous environmental statements—rather

boring documents at that, I might say from having read a few.

They have researched the issues involved, drafted written comments, appeared at public hearings, sometimes at enormous personal expense, financed litigation. They have done this despite their frequent skepticism that the Federal agencies involved had an open mind and that they even really cared about what citizens said.

However, all these citizen efforts have been effective, in my opinion, only because of the Federal courts. If we think back, it is extremely doubtful that this agency or any other Federal agency would have cared very much about NEPA if the Federal courts had not become so actively involved. As long ago as 1971, Judge Skelly Wright, in his remarkable decision in the Calvert Cliffs case, somehow was able to set forth how the NEPA process should work before the Federal agencies had even begun to make it work effectively. I think it is worth wondering how a Federal judge who, as far as I know, had never been involved in any environmental activities, somehow knew how this process ought to work and could lay it out in enormous detail in a decision in a case in court.

Based on that decision, numerous other courts throughout the country have elaborated on the statute and made it, in my opinion, more effective. Most important, the courts have occasionally—and I think if you look how often it has occurred, it really has been occasionally—issued injunctions to stop Federal actions when the statute has been violated. Maligned as the courts have often been for issuing injunctions, it is safe to say we would not have this celebration today if they had not enjoined actions and forced Federal agencies to pay attention to the law.

Amidst the good cheer of this celebration, and I have a feeling that all of us are in a sense patting ourselves on the back on how much we have accomplished, I hope that none of us assumes that the battle over NEPA has been won and there is nothing more to do but to make speeches. All too often within Federal agencies, the NEPA process constitutes little more than going through the motions. This was true in 1970, is true in 1980.

A thick Environmental Impact Statement is prepared which consists largely of an encyclopedia of meaningless facts of no importance or use to anyone, and certainly not to the decisionmakers in choosing between the alternatives which are supposed to be before them. Frequently, the statement is intended to do little more than to fend off

litigation. Often, however, it hardly matters whether the statement is any good or not, because the decisionmakers have already made up their minds before the statement was even begun. When this occurs, the NEPA process is not merely a waste of time and taxpayer money, it adds to the skepticism of so many citizens that our Government does not listen, that the citizen participation process is a sham. The fact is that NEPA only works if you, the people who administer it, attempt on a daily basis to make compliance with NEPA a fundamental and a real part of the decisionmaking process.

In addition to the challenges to NEPA which occur within our agencies, the outside challenge, the challenge in the public arena, has become more intense.

I wonder, despite all our congratulations today, whether NEPA could ever pass in the present atmosphere. Our country's leaders, having failed to develop an adequate, effective energy program, are increasingly blaming environmental laws and environmentalists. We find even longtime friends of the environment supporting legislation which will significantly weaken the procedural protections of NEPA and the substantive protections of other laws.

It seems to me that these proposals are not consistent with this celebration. I assume that we are gathered today because we believe that NEPA can provide protections

to the environment and more public participation in the decision-making process, fully consistent with timely decisions to develop sources of energy and to do the other things the country needs to have done.

If NEPA truly serves the interests of this country so well that it deserves this party, we should be seeking to strengthen it rather than to weaken it. I hope that you, in the Government, who know that NEPA has worked in the past and can work in the future, will join the citizen groups to insure that the NEPA process is not weakened and continues to be effective.

In conclusion, I must say, despite how good I feel about being invited to speak to you today by people with whom I have often fought, that I am not very optimistic. One often wonders whether a party such as this is a birthday party or a wake. As international crises seem to be increasing—economic crises, energy crises—as we hear more and more of the demands that are made upon us, I wonder whether the environment is going to be made the scapegoat. I think it will be unless all of us who care about the environment are prepared to fight to insure that it receives the proper protection at the same time that we achieve our other national goals.

Thank you.

**Statement of Gus Speth, Chairman,
Council on Environmental Quality**

It is a great pleasure to be here. I think it is wonderfully symbolic that the Department of Agriculture is hosting this tenth anniversary celebration of NEPA.

It is important that sponsorship of NEPA move out from the Council on Environmental Quality, that it move into the Federal agencies, that it move into the hearts and minds of all of us around the Federal Government. I think that this event, more than anything, symbolizes that spirit.

It is an honor for me to serve now as Chairman of the President's Council on Environmental Quality. It is an honor because

Gus Speth is Chairman of the Council on Environmental Quality. He was a staff attorney for the National Resources Defense Council, a public interest group he helped to found in 1970. There, he was responsible for many programs related to NEPA, such as energy research and development, water pollution, and corporate responsibility.

Mr. Speth has served on various committees of the District of Columbia Bar Association, and in 1970 was a law clerk to U.S. Supreme Court Justice Hugo L. Black.

John Dingell had a big role in creating the position. It is an honor because people like Russ Train have served in it before me.

I just want to thank the Congressman, while I have this opportunity, for not creating a council of 12 members.

While we are reminiscing, I might add that one of the first things I did as a young environmental attorney here in Washington 10 years ago was to send a letter to Russ Train, just as he had taken over CEQ, complaining that we had heard that draft Environmental Impact Statements were not going to be released to the public.

This was before the days of the environmental guidelines of the Council, and it was quite an issue at that time. If you could imagine a draft Environmental Impact Statement not being released to the public, it being kept as a confidential document, you can sense how far we have come over the past decade.

We have had two big battles at CEQ, or two concerns, I should say, in the past three years. One, of course, was saving CEQ, in 1977. We would not be here to celebrate in quite the same way with you today if, indeed, the reorganization people had had their way with the future of the Council on Environmental Quality.

However, we took the matter to the President for decision, and it is one of the many things to his

credit that he saw that the Council was a valuable institution and should be saved and kept in his Executive Office.

I might also add that if any of you has anything that you want to get from the President, three people sitting in the Oval Office, crying, is a very good way to persuade him to come around to your point of view.

Looking back over the decade, I think we have a great deal to be thankful for. It has been a tremendous decade of environmental progress. Let me focus on some of the things that have concerned this Department over the past decade.

The battle over channelization, raised in the early seventies, has increasingly become a joint effort among environmental and agricultural interests to preserve soil loss and to protect farmlands. The battle over pesticides has increasingly become a joint effort to promote integrated pest management. A battle over clear cutting has increasingly become an effort to manage wisely both the National Forest and private forest lands.

The battle over wilderness, well it has stayed a battle over wilderness. I suspect it will for some time.

The new partnership between environmental and agricultural interests has been symbolized, I think better than anywhere else, in the fact that the Council right now is working hand-in-glove with the Department of Agriculture on

three major projects: the National Agricultural Land Study, the Integrated Pest Management followup initiatives, and a major effort to examine what can be done to address the problem of soil erosion and loss of soil fertility. We will continue to work with you on those projects. They are vital to the future.

We can also be thankful, as we look back over the decade, that we were able to see—thanks to the advice a number of you gave us—that the time was right in 1977, at the beginning of the Carter Administration, to undertake a major effort to reform the NEPA process.

I think of NEPA as a great ship that moved well through the waters for 10 years, but picked up a lot of barnacles. It was our job, in 1977, to take those barnacles off.

Nick Yost, our General Counsel, spearheaded our effort at the Council to reform the NEPA process.

First, we went to the President and sought and got his permission

to issue binding NEPA regulations instead of loose guidelines.

We then undertook a process, involving the public and all the Federal agencies, to determine all the things that should be done to take those barnacles off. I might say that in that process, we had tremendous cooperation from the Department of Agriculture in giving us advice.

I see Sid Galler and others out there, and we had tremendous cooperation from the Department of Commerce and many other agencies of the Federal Government in putting those new principles to work. Nick and other members of the CEQ staff labored long and hard. I think they came out with a set of regulations that in the 1980's will take care of those problems that Bruce Terris mentioned about impact statements.

The Department of Agriculture

was the first agency, the first department of Government, to get its regulations out under the new Council on Environmental Quality regulations. I applaud you for doing that. I applaud you for getting out good regulations. As we look to the future, we know that we are going to have some serious environmental issues to confront in the 1980's. Some of them have been mentioned.

We clearly face a choice on energy. We and others can continue our past energy growth and risk serious climatic modifications and agricultural destabilization from carbon dioxide accumulation in the atmosphere. That problem is exacerbated by the deforestation that Russ Train just mentioned.

We have a serious question in the country of whether we are going to continue our regulatory efforts and continue to protect our resources and public health with the same kind of regulations that we have been promoting in the past decade. We must resist the efforts made by some interests, traveling under the banner of regulatory reform, to weaken our public protection regulations.

This Administration is committed to regulatory reform. It is also committed to continuing strong public protection regulations in environmental, public health, and natural resources areas.

Last, we have got to pay increasing attention in the 1980's to the global environmental context in which we are going to be making our domestic decisions. Those problems, the problems of desertification, of deforestation, of lack of fresh water, of sanitation, of hunger and food, of income disparities throughout the world, are going to be severe in the 1980's and 1990's.

We are going to have to get our domestic problems under better control and more behind us so we can give the world the kind of leadership it is going to need if we are to address not only difficult geopolitical problems, but increasingly, the food, hunger, and resource problems that the public is today much less aware of.

Thank you very much.



X. Environmental Regulations

Three sets of regulations were developed to govern the environmental actions of USDA. The first, which appeared as Secretary's Memorandum No. 1890 (Revised), establishes the Office of Environmental Quality. The others were published in the Federal Register as 7 CFR 3100, Subpart B which sets forth regulations for USDA's implementation of NEPA, and Subpart C, which determines the means for the enhancement, protection, and management of the cultural environment.

Additional regulations will be published as appropriate under 7 CFR 3100.

Establishment of the Office of Environmental Quality. Secretary Bergland took steps to strengthen the Department's commitment to improving the environment by formally establishing the Office of Environmental Quality under the direct leadership of the Assistant Secretary for Natural Resources and Environment. The text of Secretary's Memorandum No. 1890 (Revised) follows:

I. Policy. The Department of Agriculture is required to conduct its programs in ways which protect the Nation's ecological, cultural, and historic heritage. This direction is embodied in a number of statutes, Executive orders, and regulations. The major legislation and Presidential directives which apply to the Department are as follows:

National Environmental Policy Act of 1969.

Environmental Quality Improvement Act of 1970.

E. O. 11514, Protection and Enhancement of Environmental Quality, as amended by E. O. 11991, May 24, 1977,
Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act

National Historic Preservation Act of 1966.

E. O. 11593, Protection and Enhancement of the Cultural Environment, May 13, 1971, Regulations of the Advisory Council on Historic Preservation for the Protection of Historic and Cultural Properties

Federal Water Pollution Control Act of 1972.

E. O. 11738, September 1973 (Pollution Control)

E. O. 12088, October 13, 1978, (Federal Compliance with Pollution Control Standards)

Resources Conservation and Recovery Act of 1976.

Toxic Substances Control Act of 1976.

Clean Air Act as amended 1977.

Federal Insecticide, Fungicide, and Rodenticide Act, as amended 1978.

Endangered Species Act, as amended.

There are, in addition, many other important statutes which apply to specific agencies and programs (e.g., National Forest Management Act, Soil and Water Resources Conservation Act).

Department policies will reflect a sensitivity to the fact, implied in these statutes and rules, that each generation is a trustee of the environment for succeeding generations.

This memorandum reconfirms the Department of Agriculture's long term commitment to protect and improve the quality of the

human environment. It sets forth a system for planning and coordinating environmental activities within the Department.

II. Establishment of Office of Environmental Quality (OEQ)

In order to provide a focal point for environmental concerns within the Department, the Office of Environmental Quality (OEQ) is hereby established, reporting to the Assistant Secretary for Natural Resources and Environment. It will initiate, coordinate, and monitor departmental policies and programs related to the protection of environmental quality and natural resources. The Office also will advise the Secretary, the Assistant Secretary for Natural Resources and Environment, and other policy officials on environment related policies. It is to be headed by a Director, who reports directly to the Assistant Secretary for Natural Resources and Environment. Its role and mission are more specifically defined below.

III. Duties and Responsibilities

Specifically, OEQ will:

A. Coordinate environmental quality activities through use of an

Environmental Quality Committee and Work Groups as described below; serve as USDA contact with the U.S. Environmental Protection Agency (EPA); maintain the EPA-USDA Memorandum of Understanding signed January 18, 1979; serve as USDA contact with the Council on Environmental Quality (CEQ); coordinate USDA environmental activities with other Federal, State, and local agencies; and serve as a public contact and information source for USDA environmental activities.

B. Identify needs for departmentwide environmental policies; coordinate response to policy initiatives from other departments and agencies; and initiate and coordinate USDA policy for the President's Environmental Message.

C. Review and evaluate USDA environmental and related programs and progress; monitor Department agency implementation of National Environmental Policy Act (NEPA) to insure high quality environmental impact statements (EIS) and compliance with the Act.

D. Develop and maintain departmental level NEPA regulations; assist in the preparation and review of USDA agency procedures to implement CEQ regulations; and review all environmental impact statements for which the Secretary is the responsible Federal official.

E. Develop and maintain departmental level procedures to implement the National Historic Preservation Act of 1966, E.O. 11593, and regulations of the Advisory Council on Historic Preservation, 36 CFR 800; assist in the preparation and review of agency procedures to implement the National Historic Preservation Act of 1966, E.O. 11593, and 36 CFR 800 regulations; and participate in the Advisory Council on Historic Preservation compliance proceedings where resolution cannot be reached at the agency level; assist in development of training programs to achieve cultural resource management goals; and the Director will serve as the Secretary's designee to the Advisory Council on Historic Preservation (AHP).

F. Work closely with and provide regular staff assistance to the USDA Land Use Committee, established by Secretary's Memorandum No. 1807, December 14, 1977; monitor USDA agency implementation of Secretary's Memorandum No. 1827 (Revised), on protection of important

agricultural, forest, and rangelands; and monitor the implementation of E.O. 11988 and 11990 regarding management of floodplains and protection of wetlands.

G. Serve as USDA contact with EPA for the implementation of the Federal Insecticide, Fungicide, and Rodenticide Act and its amendments, and coordinate USDA policy relative to the Act; be responsible for coordinating and monitoring the Department's integrated pest management program; and coordinate the Department's pesticide assessment program, which provides the basis for USDA's portion of the Rebuttable Presumption Against Registration (RPAR) process.

H. Coordinate the Department's policies under the Toxic Substances Control Act.

I. Represent the Department on the National Response Team on hazardous spills pursuant to P.L. 92-500 and Section 4 of E.O. 11735.

IV. Department of Agriculture Environmental Quality Committee

A Department of Agriculture Environmental Quality Committee is reestablished consisting of the administrators of the following agencies:

Agricultural Marketing Service

Agricultural Stabilization and Conservation Service

Animal and Plant Health Inspection Service

Economics, Statistics, and Cooperatives Service

Farmers Home Administration

Federal Grain Inspection Service

Food Safety and Quality Service

Foreign Agricultural Service

Forest Service

Rural Electrification Administration

Science and Education Administration

Soil Conservation Service

Office of Budget, Planning and Evaluation

and Associate Members from the staff offices of:

Office of General Counsel

Office of Governmental and Public Affairs

Office of Operations and Finance

The Assistant Secretary for Natural Resources and Environment serves as Chairperson. The Assistant Secretary for Marketing and Transportation Services serves as Vice Chairperson. The Director of the Office of Environmental Quality serves as the Executive Secretary for the committee. This committee shall provide recommendations to the Program and Budget Review Board with respect to departmental policies, strategies, and legislative actions on environmental matters within the Department.

Work Groups will be established as necessary to support environmental coordination in such areas as pest management, hazardous spills, cultural resources, water quality, and air quality. The responsibility for formation and dissolution of these work groups will reside with the Executive Secretary, with the approval of the Chairperson. The work groups will be chaired by the OEQ staff or person appointed by the Executive Secretary, with the concurrence of the Chairperson.

Subpart B—National Environmental Policy Act

3100.20. Purpose.

(a) This subpart supplements the regulations for implementing the procedural provisions of NEPA, which regulations were published by the Council of Environmental Quality (CEQ) in 40 CFR Parts 1500-1508. This subpart incorporates and adopts these regulations.

(b) Words used in the provisions of this subpart shall have the same meaning as they have in the regulations of CEQ at 40 CFR Part 1508.

(c) References are made in these regulations to appropriate sections of 40 CFR 1500-1508. This has been done to direct the attention of USDA agencies to specific provisions of the CEQ regulations which are the basis for the pertinent section.

3100.21. Policy.

(a) All policies and programs of the various USDA agencies shall be planned, developed and implemented so as to achieve the goals declared by NEPA in order to assure responsible stewardship of the environment for present and future generations.

(b) Each USDA agency is responsible for compliance with the

provisions of this subpart, the regulations of CEQ and the provisions of NEPA. Compliance will include the preparation and implementation of specific procedures and processes relating to the programs and activities of the individual agency, as necessary. Those agencies whose programs and activities are of such a nature as to not come within the type of actions covered by Section 102(2) of NEPA should consult with Office of Environmental Quality (OEQ) regarding the need for developing specific implementation procedures. (1501.2, 1501.3, 1507)

(c) The Director, OEQ, shall review agencies' implementing procedures to show consistency with CEQ's NEPA regulations and will coordinate environmental assessment activities for the Office of the Secretary which come under the purview of NEPA. OEQ, in cooperation with Environmental Quality Committee, will develop the necessary processes to be used by the Office of the Secretary in reviewing, implementing and planning its activities, determinations and policies.

(d) Each agency shall develop appropriate procedures and processes in a style which will promote understanding at the field staff level.

3100.22. Categorical Exclusions.

(a) In general, every agency recommendation or report on a proposal for legislation or other major agency action which significantly affects the quality of the human environment entails certain NEPA review procedures. However, the following are categories of agency activities which have been determined not to have a significant individual or cumulative adverse effect on the human environment and are excluded from the NEPA review process, unless individual agency procedures prescribe otherwise (1508.4):

(1) Policy development, planning and implementation which relates to routine activities such as personnel, organizational changes or similar administrative functions;

(2) Activities which deal solely with the funding of programs, such as program budget proposals, disbursement, transfer, or reprogramming of funds;

(3) Inventories, research activities and studies, such as resource inventories and routine data collection when such actions are clearly limited in context and intensity (1508.27);

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- (4) Educational and informational programs and activities;
 - (5) Civil and criminal law enforcement activities;
 - (6) Activities which are advisory and consultative to other agencies, public and private entities such as legal counseling and representation;

(7) Activities related to trade representation, and market development activities overseas.

(b) Agencies will identify in their own procedures the activities which normally would not require an environmental assessment or environmental impact statement.
(1508.4)

(c) Any activity which would normally fall within one of the categories listed in paragraph (a) of this section, or in a category identified in agency procedures, but which is determined to have a potential for significant impact on the human environment shall not be eligible for exclusion from the NEPA process. Agencies shall adopt procedures to assure continuous scrutiny of activities to determine continued eligibility for categorical exclusion.

3100.23. Lead Agency Disputes.

The OEQ will coordinate, upon request, the resolution of lead agency disputes. (1501.5(e))

3100.24. Public Involvement.

All NEPA processes developed and followed by USDA agencies shall provide for public involvement. The OEQ will consult with the Office of Policy Analysis and Public Participation to coordinate between agencies in carrying out this section. (1501.4(e)(2), 1506.6, 1508.10)

3100.25. Interagency and Inter-departmental Cooperation.

(a) The USDA and its agencies shall, to the fullest extent possible, cooperate with other agencies, departments, bureaus, as well as State and local units of government to fulfill their responsibility under NEPA, utilizing memoranda of understanding or other instruments of agreement where possible.

(b) If a USDA agency is unable to cooperate to the extent formally requested by a lead agency, that agency shall reply to the lead agency that other program commitments preclude full involvement. Any such reply shall be referred to the Director, OEQ, within 10

working days of receipt of the request for submission to the lead agency and CEQ. (1501.6(c))

3100.26. Extra-Agency Expertise.

The OEQ will work with USDA agencies to identify sources of technical and editorial expertise necessary to supply interdisciplinary needs which have been identified in the scoping process and for which expertise is not available within that particular agency.

3100.27. Supplements.

A decision to prepare a supplement to an environmental document will be made by the affected agency. New findings and information relating to the decisionmaking process shall be considered in such a decision. The agency may seek advice from OEQ, and such advice shall also be considered in making the determination to prepare a supplement. (1502.9(c))

3100.28. Distribution.

All USDA agencies shall develop and maintain a distribution list for dissemination of decision documents and notices. Agencies may make distributions in addition to those prescribed in the CEQ regulations. To guide agencies in this regard, Appendix II of 40 CFR Part 1500, published in Federal Register, Vol. 38, No. 147, pages 20557-20562, on August 1, 1973, or other such lists as promulgated by CEQ, will serve as reference.

3100.29. Distribution to OEQ.

A monthly summary of significant agency activity in the NEPA process shall be forwarded to the OEQ. A negative report is not required.

3100.30. When to Prepare an EIS.

(a) In addition to those agency activities identified in 3100.22(b), USDA agencies shall identify those classes of their activities which normally require an EIS. (1507.3(b))

(b) Agency activities not covered by paragraph (a) of this section shall require an environmental assessment to support a finding of no significant impact or an agency decision to prepare an EIS. (1501.3, 1501.4)

3100.31. Impact Analysis.

(a) All environmental assessments and impact statements prepared by an agency regarding legislative proposals or program regulations shall incorporate applicable components of Impact Analysis (see Secretary's Memorandum No. 1955; Executive Order No. 12044; 40 CFR 1506.8).

(b) Incorporation of Impact Analysis procedures into agency NEPA processes is to be coordinated between the OEQ, the Department's Policy Analysis and Public Participation staff and the implementing agency (see Secretary's policy guidance to USDA agencies: Guidelines for Impact Analysis and Environmental Impact Statements, September 25, 1978).

3100.32. Tiering.

Tiering, as set forth in 40 CFR 1502.20, shall be incorporated by agencies in their NEPA procedures. The OEQ will assist agencies regarding specific questions concerning tiering.

3100.33. Problems in Response to Comments.

Problems concerning the appropriate response to comments on environmental impact statements shall be resolved, if possible, at the agency staff level. Problems between USDA agencies not resolved by the final EIS shall be submitted to the heads of respective agencies for resolution with mediation, if necessary, by OEQ. OEQ will also be informed of agency problems with agencies outside USDA and will be available to help resolve disputes as necessary. (1503.2, 1503.3, 1503.4)

3100.34. Implementation of Agency Determination.

Each agency shall develop NEPA implementing procedures and other appropriate internal procedures to provide for mitigation, monitoring or any other actions or conditions necessary to properly carry out the determinations established during their NEPA process. (1505.3)

3100.35. Emergencies.

The procedures developed by each agency shall include those NEPA review actions necessary in relation to agency responses to emergency situations. (1506.11).

Subpart C—Enhancement, Protection and Management of the Cultural Environment

3100.40. Purpose.

- (a) This subpart establishes USDA policy regarding the enhancement, protection, and management of the cultural environment.
- (b) This subpart establishes procedures for implementing Executive Order 11593, and regulations promulgated by the Advisory Council on Historic Preservation (AChP) "Protection of Historical and Cultural Properties" in 36 CFR Part 800 as required by Section 800.10 of those regulations.
- (c) Direction is provided to the agencies of USDA for protection of the cultural environment.

3100.41. Authorities.

These regulations are based upon and implement the following laws, regulations and Presidential directives:

- (a) **Antiquities Act of 1906** (P.L. 59-209; 34 Stat. 225; 16 U.S.C. 431 et seq.) which provides for the protection of historic or

prehistoric remains or any object of antiquity on Federal lands; establishes criminal sanctions for authorized destruction or appropriation of antiquities; and authorizes scientific investigation of antiquities on Federal lands, subject to permit and regulations. Paleontological resources also are considered to fall with the authority of this Act.

(b) **Historic Sites Act of 1935** (P.L. 74-292; 49 Stat. 666; 16 U.S.C. 461 et seq.) which authorizes the establishment of National Historic Sites and otherwise authorizes the preservation of properties of national historical or archeological significance; authorizes the designation of National Historic Landmarks; establishes criminal sanctions for violation of regulations pursuant to the Act; authorizes interagency, intergovernmental, and interdisciplinary efforts for the preservation of cultural resources; and other provisions.

(c) **Reservoir Salvage Act of 1960** (P.L. 86-521; 74 Stat. 220; 16 U.S.C. 469-469c.) which provides for the recovery and preservation of historical and archeological data, including relics and specimens, that might be lost or destroyed as a result of the construction of dams, reservoirs, and attendant facilities and activities.

(d) The National Historic Preservation Act of 1966 as amended (16 U.S.C. 470), which establishes positive national policy for the preservation of the cultural environment, and set forth a mandate for protection in Section 106. The purpose of Section 106 is to protect properties on or eligible for the National Register of Historic Places through review and comment by the ACHP of Federal undertakings that affect such properties. Properties are listed on the National Register or declared eligible for listing by the Secretary of the Interior. As developed through the ACHP's regulations, Section 106 establishes a public interest process in which the Federal agency proposing an undertaking, the State Historic Preservation Officer, the ACHP, interested organizations and individuals participate. The process is designed to insure that properties, impacts on them, and effects to them are identified, and that alternatives to avoid or mitigate an adverse effect on property eligible for the National Register are adequately considered in the planning process.

(e) The National Environmental Policy Act of 1969 (NEPA) (P.L. 91-190; 83 Stat. 852; 42 U.S.C. 4321 et seq.) which declares that it is the policy of the Federal Government to preserve important historic, cultural, and natural aspects of our national heritage. Compli-

ance with NEPA requires consideration of all environmental concerns during project planning and execution.

(f) Executive Order 11593, "Protection and Enhancement of the Cultural Environment," which gives the Federal Government the responsibility for stewardship of our nation's heritage resources and charges Federal agencies with the task of inventorying historic and prehistoric sites on their lands. E.O. 11593 also charges agencies with the task of identifying and nominating all historic properties under their jurisdiction, and exercising caution to insure that they are not transferred, sold, demolished, or substantially altered.

(g) Historical and Archeological Data Preservation Act of 1974. (P.L. 93-291; 88 Stat. 174.) which amends the Reservoir Salvage Act of 1960 to extend its provisions beyond the construction of dams to any alteration of terrain caused as a result of any Federal construction project or Federally licensed activity or program. In addition, the Act provides a mechanism for funding the protection of historical and archeological data.

(h) Presidential memorandum of July 12, 1978, “Environmental Quality and Water Resource Management” which directs the ACHP to publish final regulations, implementing Section 106 of the National Historic Preservation Act (NHPA), and further directs each agency with water and related land resources responsibilities to publish procedures implementing those regulations.

(i) 36 CFR Part 800, “Protection of Historic and Cultural Properties” which establishes procedures for the implementation of Section 106 of the NHPA, and directs publication of agency implementing procedures.

(j) Land use policy of the USDA (Secretary’s Memorandum No. 1827 Revised, with Supplement) which establishes a commitment by the Department to the preservation of farms, rural communities, and rural landscapes.

(k) Public Buildings Cooperative Use Act of 1976 (40 U.S.C. 611) and Executive Order 12072 (Federal Space Management). The Act encourages adaptive use of historic buildings as administrative facilities for Federal agencies and activities; the Executive Order directs Federal agencies to locate administrative and other facilities in central business districts.

(1) American Indian Religious Freedom Act of 1978 (42 U.S.C. 1996) which declares it to be the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians.

3100.42 Definitions.

All definitions are those which appear in 36 CFR 800. In addition, the following apply in this rule:

Cultural resources (heritage resources) are the remains or records of districts, sites, structures, buildings, networks, neighborhoods, objects, and events from the past. They may be historic, prehistoric, archeological, or architectural in nature. Cultural resources are an irreplaceable and nonrenewable aspect of our national heritage.

Cultural environment is that portion of the environment which includes reminders of the rich historic and prehistoric past of our nation.

3100.43. Policy.

(a) The nonrenewable cultural environment of our country constitutes a valuable and treasured portion of the national heritage of the American people. The Department of Agriculture is committed to the management—identification, protection, preservation, interpretation, evaluation and nomination—of our prehistoric and historic cultural resources for the benefit of all people of this and future generations.

(b) The Department supports the cultural resource goals expressed in Federal legislation, executive orders, and regulations.

(c) The Department supports the preservation and protection of farms, rural landscapes, and rural communities.

(d) The Department is committed to consideration of the needs of American Indians, Eskimo, Aleut, and Native Hawaiians in the practice of their traditional religions.

(e) The Department will aggressively implement these policies to meet goals for the positive management of the cultural environment.

3100.44. Implementation.

(a) It is the intent of the Department to carry out its program of management of the cultural environment in the most effective and efficient manner possible. Implementation must consider natural resource utilization, must exemplify good government, and must constitute a noninflationary approach which makes the best use of tax dollars.

(b) The commitment to cultural resource protection is vital. That commitment will be balanced with the multiple Departmental goals of food and fiber production, environmental protection, natural resource and energy conservation, and rural development. It is essential that all of these be managed to reduce conflicts between programs. Positive management of the cultural environment can contribute to achieve better land use, protection of rural communities and farm lands, conservation of energy, and more efficient use of resources.

(c) In reaching decisions, the long-term needs of society and the irreversible nature of an action must be considered. The Department must act to preserve future options; loss of important cultural resources must be avoided except in the face of overriding national interest where there are no reasonable alternatives.

(d) To assure the protection of Native American religious practices, traditional religious leaders and other native leaders (or their representatives) should be consulted about potential conflict areas in the management of the cultural environment and about the means to reduce or eliminate such conflicts.

3100.45. Direction to Agencies.

(a) Each agency of the Department shall consult with OEQ to determine whether its programs and activities may affect the cultural environment. Then, if needed, the agency, in consultation with OEQ, shall develop its own specific procedures for implementing Section 106 of the National Historic Preservation Act, Executive Order 11593, the regulations of the ACHP (36 CFR Part 800), the American Indian Religious Freedom Act of 1978 and other relevant legislation and regulations in accordance with the agency's programs, mission and authorities. Such implementing procedures shall be published as proposed and final procedures in the Federal Register, and must be consistent with the requirements of 36 CFR Part 800 and this subpart. Where applicable, each agency's procedures must contain mechanisms to insure:

- (1) Compliance with Section 106 of NHPA and mitigation of adverse effects to cultural properties on or eligible for the National Register Historic Places;
- (2) Clear definition of the kind and variety of sites and properties which should be managed;
- (3) Development of a long-term program of management of the cultural environment on lands administered by USDA as well as direction for project-specific protection;
- (4) Identification of all properties listed on or eligible for listing in the National Register that may be affected directly or indirectly by a proposed activity;
- (5) Location, identification and nomination to the Register of all sites, buildings, objects, districts, neighborhoods, and networks under its management which appear to qualify (in compliance with E.O. 11593);
- (6) The exercise of caution to assure that properties managed by USDA which may qualify for nomination are not transferred, sold, demolished, or substantially altered;

(7) Early consultation with, and involvement of, the State Historic Preservation Officer(s), the ACHP, Native American traditional religious leaders and appropriate tribal leaders, and others with appropriate interests or expertise;

(8) Early notification to insure substantive and meaningful involvement by the public in the agency's decisionmaking process as it relates to the cultural environment:

(9) Identification and consideration of alternatives to a proposed undertaking that would mitigate or minimize adverse effects to a property identified under (4) above;

(10) Funding of mitigation measures, where required, to minimize the potential for adverse effects on the cultural environment. Funds shall be available and shall be spent when needed during the life of the project to mitigate the expected loss; and

(11)(a) Development of plans to provide for the management, protection, maintenance and/or restoration of Register sites under its management.

(b) Each agency of the Department which conducts programs or activities that may have an effect on the cultural environment shall recruit, place, develop, or otherwise have available, professional expertise in anthropology, archeology, history, historic preservation, historic architecture, and/or cultural resource management (depending upon specific need). Such arrangements may include internal hiring, Intergovernmental Personnel Act assignments, memoranda of agreement with other agencies or Departments, or other mechanisms which insure a professionally directed program. Agencies should use Department of the Interior professional standards (36 CFR 61.5) as guidelines to insure Departmentwide competence and consistency.

(c) Compliance with cultural resource legislation is the responsibility of each individual agency. Consideration of cultural resource values must begin during the earliest planning stages of any undertaking.

(d) Agency heads shall insure that cultural resource management activities meet professional standards as promulgated by the Department of the Interior (e.g., 36 CFR 60, 63, 66, 1208).

(e) Cultural resource review requirements and compliance with Section 106 of NHPA and Executive Order 11593 shall be integrated and run concurrently, rather than consecutively, with the other environmental considerations under NEPA regulations. As such, direct and indirect impacts on cultural resources must be addressed in the environmental assessment for every agency undertaking. In meeting these requirements, agencies shall be guided by regulations implementing the procedural provisions of NEPA (40 CFR Parts 1500-1508) and Department of Agriculture regulations (7 CFR Part 3100, Subpart B).

(f) Each agency shall work closely with the appropriate State Historic Preservation Officer(s) in their preparation of State plans, determination of inventory needs, and collection of data relevant to general plans or specific undertakings in carrying out mutual cultural resource responsibilities.

(g) Each agency shall, to the maximum extent possible, use existing historic structures for administrative purposes in compliance with Public Buildings Cooperative Use Act of 1976 and Executive Order 12072, "Federal Space Management."

(h) Each agency should consult with Native American traditional religious leaders or their representatives and other native leaders in the development and implementation of cultural resource programs which may affect their religious customs and practices.

3100.46. Responsibilities of the Department of Agriculture.

(a) Within the Department, the responsibility for the protection of the cultural environment is assigned to the Office of Environmental Quality (OEQ). The Office is responsible for reviewing the development and implementation of agency procedures and insuring Departmental commitment to cultural resource goals.

(b) The Director of the OEQ is the Secretary's designee to the ACHP.



(c) In order to carry out cultural resource responsibilities, there will be professional expertise within the OEQ to advise agencies, aid the Department in meeting its cultural resource management goals, and insure that all Departmental and agency undertakings comply with applicable cultural resource protection legislation and regulations.

(d) The OEQ will be involved in individual compliance cases only where resolution cannot be reached at the agency level. Prior to the decision to refer a matter to the full Council of the ACHP, the OEQ will review the case and make recommendations to the Secretary regarding the position of the Department. The agency also will consult with the OEQ before reaching a final decision in response to the Council's comments. Copies of correspondence relevant to compliance with Section 106 will be made available to OEQ.

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